

# MANUFACTURERS' RECORD

A Weekly Southern Industrial and Hardware Newspaper.

VOL. XV. No. 6  
WEEKLY.

BALTIMORE, MARCH 16, 1889.

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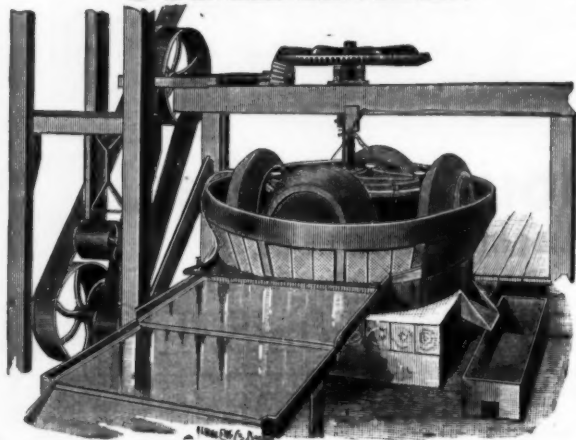
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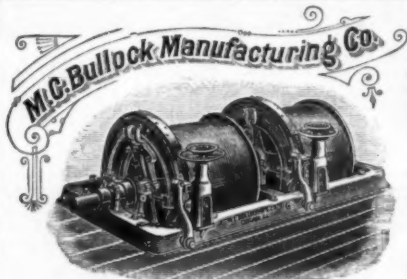
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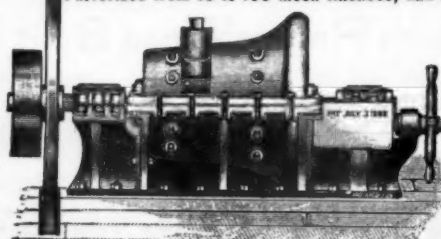
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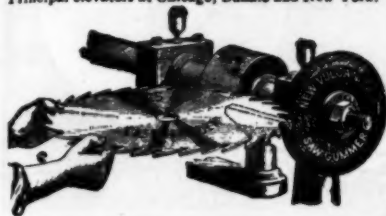
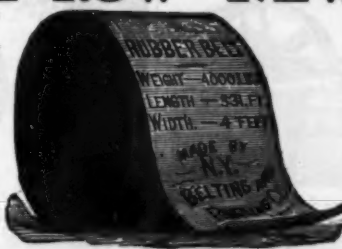
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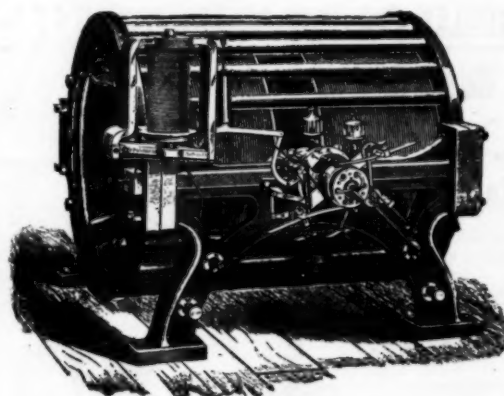
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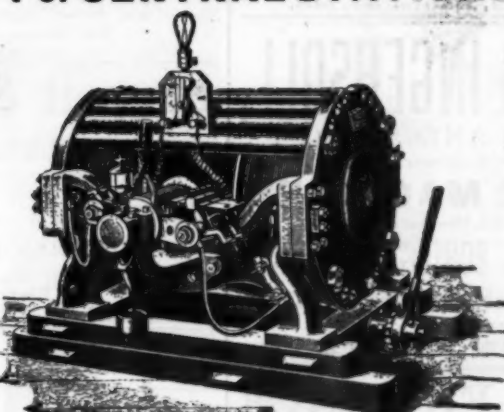
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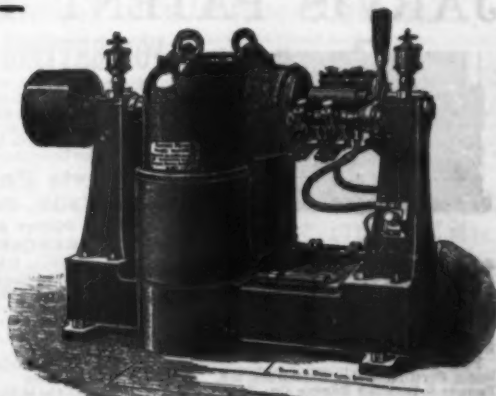
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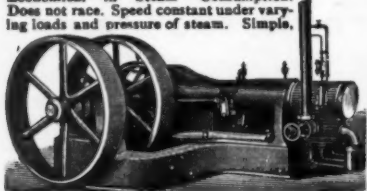
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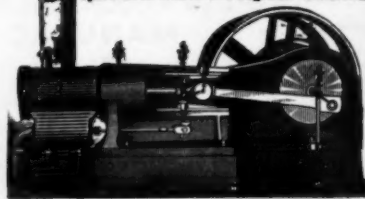
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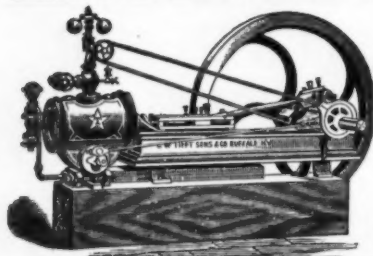
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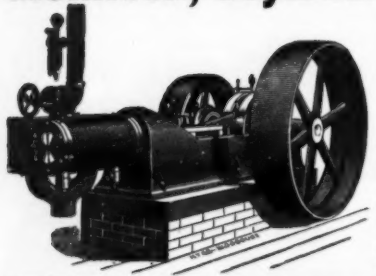
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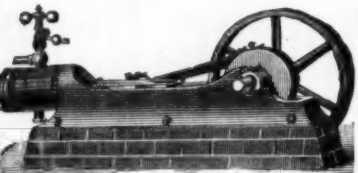
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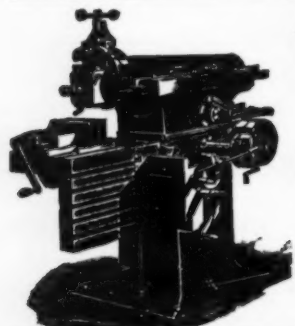
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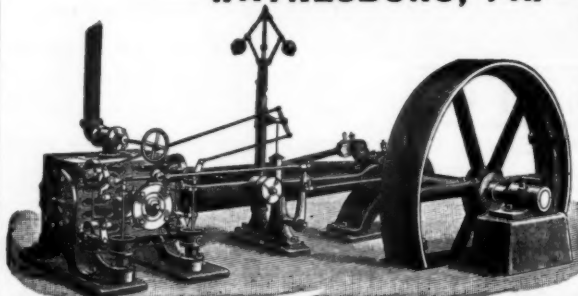
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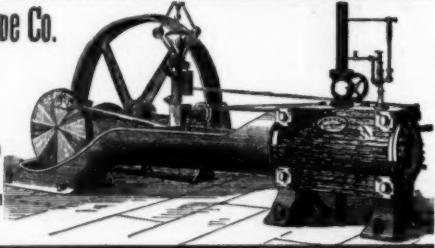
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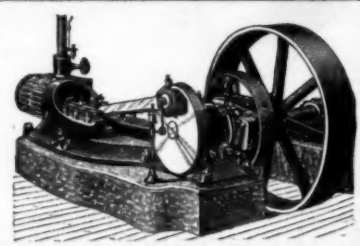
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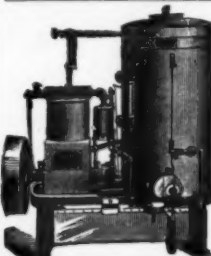
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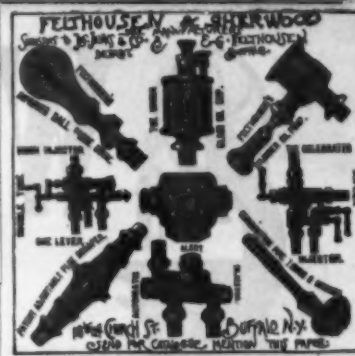
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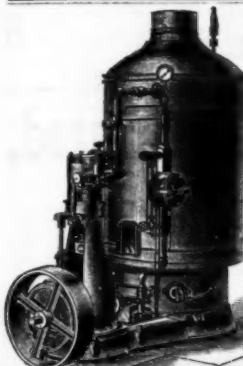
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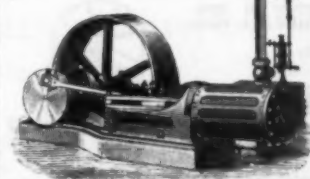
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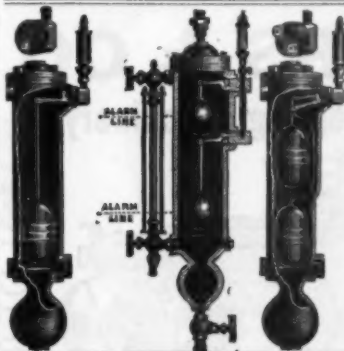
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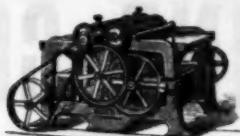
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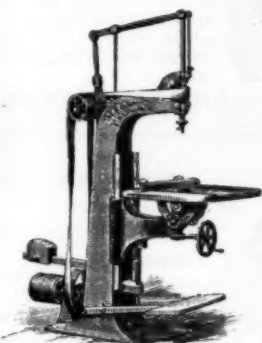
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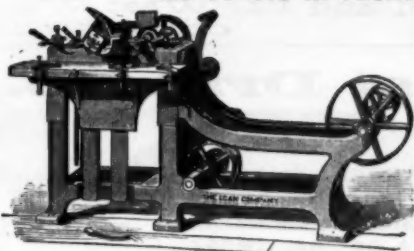
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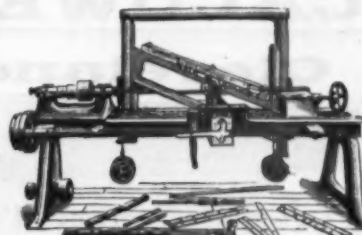
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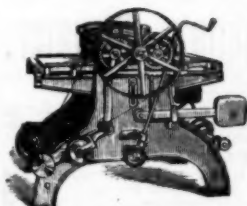
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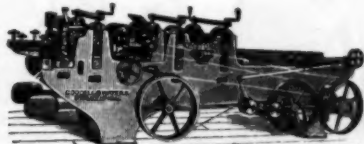
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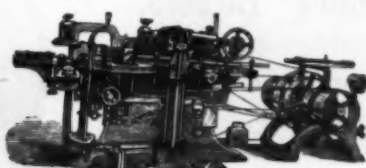
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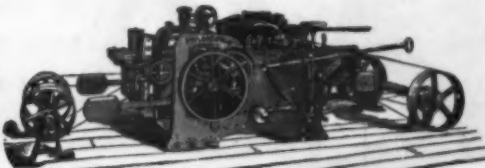
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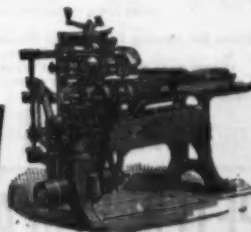
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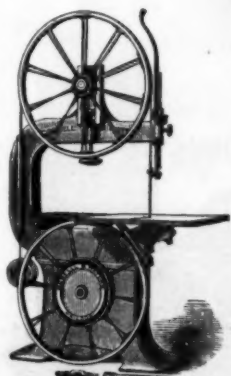
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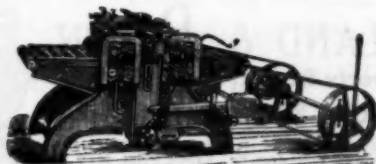
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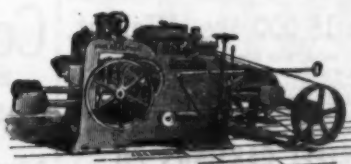
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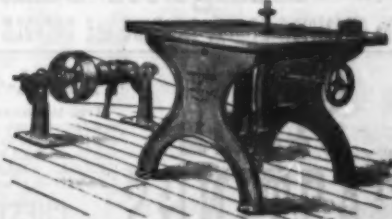
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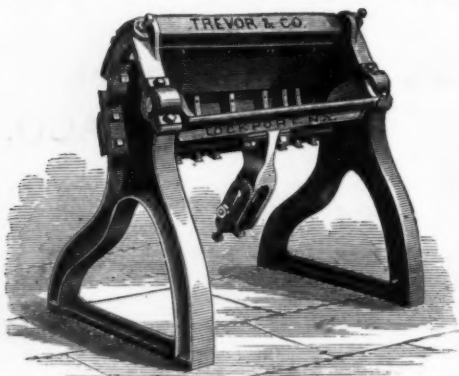
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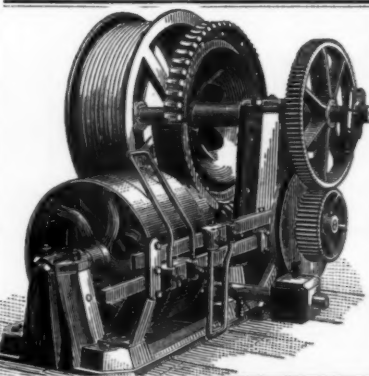
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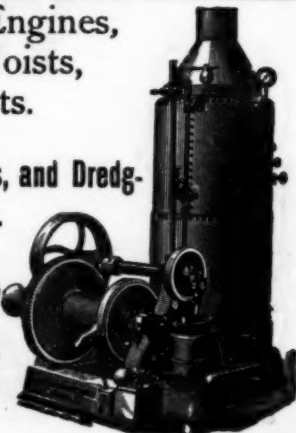
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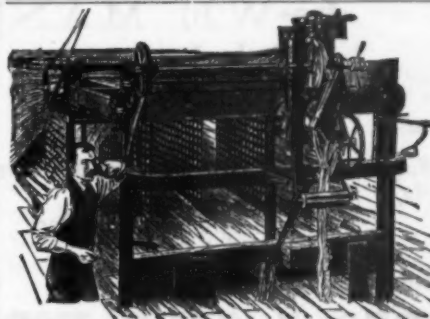


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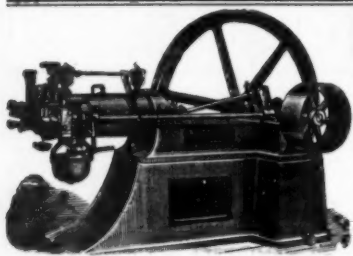
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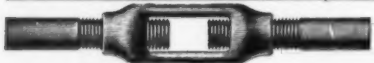
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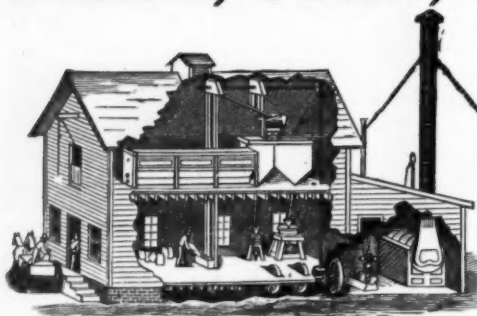
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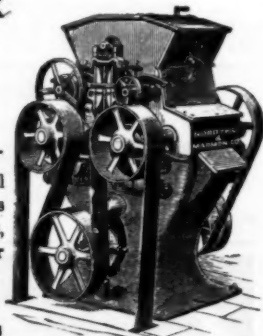


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BALTIMORE, MARCH 16, 1889.

## The Final Test Has Come.

The MANUFACTURERS' RECORD publishes in this issue a letter on Southern iron-making which is of unusual interest. It was written by a gentleman who for 20 or 30 years has been closely identified with the industrial interests of the central South, and who is intimately acquainted with the inside workings of nearly all the leading iron companies of that section. In connection with the facts presented in the last issue of the MANUFACTURERS' RECORD as to the development of iron-making in the South, even while Northern furnaces are going out of blast, some of the statements made in this letter are strikingly important. The writer, referring to the fact mentioned last week that a number of new furnaces are to be built in the South, adds that not only are they to be built by men now in the iron business, thus showing their faith in the continued prosperity of this industry, but they are to be built out of the profits made on iron during the last year or two, notwithstanding the extremely low prices that have prevailed. While many Northern furnaces have been unable even to hold their own during the period of low prices, Southern furnaces have made money enough to justify the erection of additional costly plants. In fact, says this writer, Southern iron men have made more money than they care for the world to know.

Of the new furnaces to be built this year, probably ten or twelve will be commenced in Alabama, mainly by the most experienced iron men of that State, while English and Northern capital will also take an active part in building others. In Kentucky a half dozen or so furnaces will be put under construction this year, while Virginia, Tennessee and Texas are joining in the procession. These facts are worthy of thoughtful consideration. A few years ago all that could be said was that the South *would* be able to make iron and undersell Northern furnaces, and that the great test would come during a period of low prices, for when prices are high all furnaces can run, but now we can say that Southern furnaces are underselling their Northern competitors, and that the great test has come which is proving to the world that Southern furnaces are making money while many Northern furnaces are unable to pay expenses. Comment is needless.

## America's Historical Policy.

The history of American progress in manufactures and commerce has never been more lucidly and tersely stated than in the inaugural address of President Harrison. We repeat his glowing sentences now, because they will put before our readers the argument for protection in clear and concise terms. Said the president:

"The surrender of a large measure of sovereignty to the General Government effected by the adoption of the Constitution was not accomplished until the suggestions of reason were strongly reinforced by the more imperative voice of experience. The divergent interests of peace speedily demanded a 'more perfect union.' The merchant, the shipmaster and the manufacturer discovered and disclosed to our statesmen and to the people that commercial emancipation must be added to the political freedom which had been so bravely won. The commercial policy of the mother country had not relaxed any of its hard and oppressive features. To hold in check the development of our commercial marine, to prevent or retard the establishment and growth of manufactures in the States, and so to secure the American market for their shops and the carrying trade for their ships, was the policy of European statesmen, and was pursued with the most selfish vigor. Petitions poured in upon Congress urging the imposition of discriminating duties that should encourage the production of needed things at home. The patriotism of the people, which no longer found a field of exercise in war, was energetically directed to the duty of equipping the young Republic for the defence of its independence by making its people self-dependent. Societies for the promotion of home manufactures and for encouraging the use of domestics in the dress of the people were organized in many of the States. The revival at the end of the century of the same patriotic interest in the preservation and development of domestic industries and the defence of our working people against injurious foreign competition is an incident worthy of attention. It is not a departure but a return that we have witnessed. The protective policy had then its opponents. The argument was made as now that its benefits inured to particular classes or sections. If the question became in any sense, or at any time, sectional, it was only because slavery existed in some of the States. But for this, there was no reason why the cotton-producing States should not have led or walked abreast with the New England States in the production of cotton fabrics. There was this reason only why the States that divide with Pennsylvania the mineral treasures of the great southeastern and central mountain ranges should have been so tardy in bringing to the smelting furnace and the mill the coal and iron from their near opposing hillsides. Mill fires were lighted at the funeral pile of slavery. The Emancipation proclamation was heard in the depths of the earth, as well as in the sky; men were made free, and material things became our better servants. The sectional element has happily been eliminated from the tariff discussion. We have no longer States that are necessarily only planting States. None are excluded from achieving that diversification of pursuit among the people which brings wealth and contentment. The cotton plantation will not be less valuable when the product is spun in the country town by operatives whose necessities call for diversified crops and create a home demand for garden and agricultural products. Every new mine, furnace and factory is an extension of the productive capacity of the State more real and valuable than added territory."

Our readers will agree with us that President Harrison has tersely stated

historical facts known to the whole country. He has done still more, for in the one sentence, "It is not a departure but a return that we have witnessed," he has led us back to the days of Washington, Jefferson and Jackson, and has told us (what we all knew, but many of us were loth to acknowledge,) that the Federal and Democratic leaders of the earlier years of our Republic, disagreeing on many other subjects as they did, were in hearty accord in protecting American industries on land and on the high seas. Furthermore he has shown us that our glorious nation, of which each individual citizen is a unit, owes its existence, its growth, its magnificent development and its still grander prospects to that constitution under which we live, and to that protection which fostered industrial development.

In those early days "the commercial policy of the mother country had not relapsed any of its hard and oppressive features," said President Harrison. Who that studies the economic policies of all nations does not know that Great Britain and the other European commercial nations never have shown any signs of a relaxation in favor of the United States. Why should they? Every foreign government is bound, in the very nature of things, to look after the commercial and industrial interests of its own citizens. The only commercial country in the world that has occasionally failed to do that has been the United States of America. That time has gone by. We no longer listen to the seductive teachings of the Cobden Club and its American adherents, but to that patriotic sentiment, welling up from the hearts of American citizens, that declares for the protection of our home industries, for the development of our natural resources, for the assertion and maintenance of our commercial and maritime rights in all parts of the world, and for the protection of American citizens everywhere and under all circumstances.

The inaugural address is a notice to the people of this and of all other lands, that from henceforth the executive forces of the nation, backed by the supreme power of the people (whose will they execute), will be employed in the furtherance of American interests, in the protection of American individual rights, and in forwarding at home and abroad the peace and prosperity of this great people.

Whatever the differences of opinion may have been heretofore engendered, or growing out of local or partisan considerations, we are sure that these will all disappear, and that a united people will sustain their President in carrying out the pure American policy he has boldly and clearly announced. Or, if there be here and there men so blind that they cannot look upon the progress of the age without being dazzled and confused, they will keep company with the

owls and bats of mankind, and cease to influence the communities in which they live.

In the early days of this country protection unified, consolidated and constructed the Republic. "It is not a departure, but a return, that we have witnessed."

## An Illustration of Southern Progress.

It has been but a few months since the Georgia Southern & Florida Railroad was opened for business, and yet in that brief period about 50 saw mills have been established along this line, and they are now cutting at the rate of over 400,000 feet of lumber a day, while still more mills and turpentine distilleries are rapidly going up. And yet the supply of timber along this road is so vast that even this heavy cutting will not make any appreciable diminution for many years. The list of mills that have been started during the last few months, and their daily capacity, as compiled for the MANUFACTURERS' RECORD, shows that 48 mills are now in operation, while a number of others are building. In a letter to the MANUFACTURERS' RECORD on this subject, Mr. W. W. Collins, of Macon, Ga., says:

I herewith hand you a list of new industries on the line of the Georgia Southern & Florida Railroad. It will interest you, no doubt, to know that the country through which this road runs, up to the building of the road, was undeveloped and perfectly wild—solid forests of the celebrated Georgia yellow pine, and one year ago had but few inhabitants; in fact, there was but a small cabin every two or three miles, and taking the new road as a center, they were from 25 to 40 miles from a railroad. Now in this short time the daily output of lumber reaches the enormous amount of 401,000 feet or 80 car-loads per day, the rosin and turpentine at the rate of 42,400 barrels per annum, and new mills and stills going up daily.

Land that two years ago sold at 50 cts. per acre is now looked upon as cheap at \$3 per acre, and every five miles, from Macon to Valdosta, a new town has sprung into existence. Cordele 14 months ago was an old cotton field. Now it has over 300 houses, a population of 1,000, two hotels, a \$50,000 bank, a newspaper, savings and loan association, cotton and oil mill and other industries. The hotels are crowded every night, and property selling frequently over and over again daily. The Georgia Southern & Florida is a great developer—now in operation to Valdosta, Ga., 131 miles, and over 600 men at work below Valdosta under contract to complete the road to Lake City, Fla., by August of this year. The destination is Palatka, Fla.

The opening of these new enterprises and the development of our hitherto unknown resources marks a new era in the South of success and prosperity.

A number of Baltimore capitalists are interested in this enterprise. Messrs. John A. Hambleton, John Gill, Robert Ober and others are large owners of the stocks and bonds of the company, and the Mercantile Trust & Deposit Co., of your city, are trustees for the bondholders.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the MANUFACTURERS' RECORD



### Another Great Enterprise.

For many years Shelby, Ala., has been noted for the charcoal pig iron produced there. The Shelby Iron Co., whose history dates back to war times, but which is now largely owned by Connecticut capitalists, has two furnaces that annually produce about 25,000 tons of car-wheel iron, than which there is none better made in the United States. A town of about 1,200 inhabitants has grown up around these furnaces, but the property has all been held by the Shelby Iron Co. Shelby now holds somewhat the position which Anniston did before it was thrown open to the public. It is not a projected town; the town is already there and is backed by extensive and prosperous enterprises in operation for many years. It has the finest grade of iron ore in abundance; it is but a short distance from the celebrated Cahaba coal fields; it has good water, a fine climate, and all the raw materials needed for cotton, iron or wood working industries. The owners of the town have now decided to throw it open to the public and invite outside men and money to come in and build on the solid foundation already laid, as Anniston did a few years ago. With the start that Shelby already has, and the great industrial progress that Alabama is making, there seems to be no reason why this place, so abundantly favored by nature, should not fully rival the wonderful growth which has made Anniston so widely known all over the country. The Shelby Iron Co. will push this great enterprise, and they propose to take active steps towards securing the establishment of car works, cotton mills, rolling mills and kindred industries, and to offer liberal inducements with that object in view. Thus, one more great industrial center on a solid and substantial basis is to be added to the ever-increasing number which is helping to make the South rich. The MANUFACTURERS' RECORD, knowing of the vast wealth of ore in and around Shelby, of the great success of its two furnaces, and of the possibilities that the development of its resources present to energy and capital, congratulates the Shelby Iron Co. on their determination to open the town to the public, that a great city may be built where now stands a prosperous iron town. Mr. H. R. Stoughton, the general manager of this company, in a letter to the MANUFACTURERS' RECORD, says:

We are at the present time preparing our maps with a view to placing ourselves in a position to bring industries here. We can build a town equally as handsome as Anniston, for we have the contour; we have excellent water and excellent drainage, and no place in Alabama can show a better health record than Shelby. With a population of 1,200 people, we only lost seven in the last year. Three of these were old people. We call that a very good showing, and with our railroad connections, which we anticipate will be made during the coming year, both to Sylacauga and possibly to Blockton, we

will be in condition to offer facilities to shippers equal to any of the new growing towns. We have an inexhaustible mine of ore right at our furnaces. We have plenty of lime, and all round us we have hundreds of acres more ore than we are drawing from for our supply. The output of our furnaces reaches nearly 25,000 tons of the best car-wheel iron made south of the Ohio river, if not the best made in this country.

A CORRESPONDENT of the New York Commercial Bulletin, who has lately given that paper several very interesting letters on South Carolina, in his last letter, referring to the remarkable increase in manufacturing interests in the State, presented the following:

#### MANUFACTURES IN SOUTH CAROLINA.

|                        | 1860.       | 1870.       |
|------------------------|-------------|-------------|
| Capital.....           | \$6,931,756 | \$5,400,000 |
| Value of products..... | 8,615,000   | 9,859,000   |
| Number of hands.....   | 6,994       | 8,141       |
| Amount of wages.....   | 1,380,000   | 1,543,000   |

The progress since 1870, will appear from the following comparison:

|                      | 1870.       | 1880.        | 1887.        |
|----------------------|-------------|--------------|--------------|
| Hands employed...    | 8,141       | 15,828       | 34,417       |
| Capital employed...  | \$5,400,000 | \$11,806,000 | \$32,204,000 |
| Value of products... | 9,859,000   | 16,378,000   | 31,975,000   |

The capital now employed in all manufactures is three times that of 1860, and the value of the products  $2\frac{1}{2}$  times what it was then. Comparing the present with the status of 1870, it does not materially vary from the result of the previous comparison; so that this gain has been made almost entirely within the last seventeen years, and the major part of it has been realized since 1880, both the capital invested and the value of the product in 1887 being about double the figures for 1880.

In 1880 manufactures contributed 23 per cent. of the value of the entire industrial product of the State; in 1887 the ratio derived from that source was 31 per cent. This comparison strikingly exhibits the superior energy and success of the manufacturing branches of South Carolina industry, as compared with the agricultural, and warrants the hope that what the State lacks in the latter it may more than realize in the former. It is questionable whether any other State in the Union can show a rate of increase since 1880 superior or even equal to this.

All honor to South Carolina. She has done remarkably well, and especially so when we consider the political troubles that so long harassed her people, but to say that no other State can show such a rate of progress is far from correct. A half dozen Southern States have probably surpassed it—certainly Alabama, Tennessee and Georgia have; in fact, Jefferson county, Ala., alone has probably three times as much capital invested in manufactures as all Alabama had in 1880. Even Anniston has more capital in this line than the whole State had nine years ago, while a dozen other towns have made wonderful progress. The MANUFACTURERS' RECORD rejoices in the prosperity of South Carolina, but it cannot let the statement pass that no other State has done more than double its manufacturing capital since 1880, when some of them have more than quadrupled, if not quintupled, their investments in manufactures in the last nine years.

**If you are not already a subscriber to the MANUFACTURERS' RECORD, send us \$4 and you will receive it regularly for one year or six months for \$2.00.**

A YEAR ago the editor of the MANUFACTURERS' RECORD met a nephew of Hon. Abram S. Hewitt in Alabama investigating for his uncle the mineral resources of that section, and especially as to the possibility of finding good steel ores. Even then it was reported that the great works of Cooper, Hewitt & Co. would be moved South, or else that the firm would build new works there, and negotiations were talked of looking towards securing a site in one of Alabama's most progressive cities. Of Alabama, Mr. Hewitt years ago predicted that it would become "the greatest center of coke made iron on the globe." These facts, taken in connection with the present visit of Messrs. Hewitt and Cooper to the South, doubtless mean that if a good location is found, this great iron house, which stands so high in the North, will move to the South. The influence of such a step would be worth untold millions to this section.

Another great enterprise which the South is likely to secure is extensive car works by the Pullman Palace Car Co. President Pullman, as stated several times in the MANUFACTURERS' RECORD, has for a year or more been considering the advisability of building large works in the South, and now that his company has secured control of the Mann and Woodruff cars, thus giving his line the monopoly in this section, there are, we understand, good prospects of this enterprise being carried out. What city will be fortunate enough to secure the works remains to be seen.

NAPOLEON HILL, R. D. Frayser and other Memphis capitalists have organized a \$5,000,000 land and improvement company and purchased several thousand acres of land at Stevenson, Ala., where they propose to build an industrial town. Stevenson is at the junction of two important railroads, and its mineral resources in quantity and quality are probably scarcely surpassed even by Birmingham's. In fact, that section of North Alabama has a wealth of iron and coal that is almost beyond calculation, and the building of new railroads is destined to open it up in a way that will cause as rapid development as has marked the most thriving industrial centers of the State.

THE immensity of the freight traffic which Southern furnaces are developing, as so often pointed out in the MANUFACTURERS' RECORD, may be partly understood from the fact the Ensley furnaces at Ensley, Ala., ordered 700 cars at one time a few days ago for shipping pig iron East, and the Birmingham Mineral Railroad, whose business is mainly confined, as its name indicates, to mineral traffic, handled 21,000 cars of freight during February. This is what the iron business is doing for Southern railroads.

## IRON-MAKING SOUTH.

### Some Striking Statements.

**New Furnaces to Be Built With Profits from Those Now Running.**

**The South's Future Grows Steadily Brighter.**

ATLANTA, GA., March 9, 1889.

*Editor Manufacturers' Record:*

In your last issue there are two very suggestive articles, one "The Handwriting on the Wall," pointing out from the experience of Northern furnaces the impossibility of many of them continuing in operation in competition with Southern iron, and the other the letter of Mr. S. B. Lowe, of Chattanooga, and your comments thereon, calling attention to the fact that a large number of new furnaces are to be built in the South. Northern furnaces failing or going out of blast, while Southern furnaces are steadily pressing forward to enlarge their production! What is the explanation? The MANUFACTURERS' RECORD answered this question when it said that the South is to be the future center of the iron and steel trade of the world, and that "that nation, or that section of any nation, which possesses supremacy in the production of iron and steel, and in their conversion to final forms for use, will dominate and control the commerce of the world."

I am able to add to what you and Mr. Lowe said on this subject some information that may prove of public value. Not only will a large number of new furnaces be built in Alabama and other Southern States, no hint of which has been made public, though the plans have been fully matured, but the most significant feature is that the money that is to go into these new plants has been made out of those that have been running, which is an item that the Northern iron producers are little dreaming of, and would scarcely believe if it should be stated upon the very best authority, but it is true, nevertheless. The fact is that the Southern furnaces have made more money during the past year than they are willing that the outside world should know. The situation of the Southern stacks has been and is now about as follows: When furnace building first commenced in the South most of them were rated at 35 to 50 and 60 tons per day. Now, to give you an idea of what they are now doing I will cite you to one in particular that I have in my mind. It was built for a 35-ton furnace. It ran along at this for a few weeks, and by the inattention of the keeper, who allowed his buggy men to put in more stock, it ran up to about 40 and 45. He was a little alarmed, but it appeared to hold its own, and the foreman slowly and very carefully experimented with it, and when it got up to 50 and 60 they thought the world was coming to an end. To-day it is making from 100 to 125 tons per day. While this is one of the extreme cases, there is hardly a stack in the Southern States but what has increased its output from 50 to 75 per cent., making better iron and decreasing the expense from 35 to 60 per cent. This may seem to you an exaggerated statement, but it is true. There is many a stack now running in the South that is making iron at \$8.50 per ton, and I know of none that is costing over about \$11. Hence, I think you can readily comprehend why our furnace owners are averse to pig iron going up in market price over \$3 or \$3 per ton. At that advance there is no question but what many of the Northern stacks will simply have to blow out. Those that are more favorably located will, of course, continue to blow, but those that are not so favorably situated must in a short time go under. A few of our companies are heav-



ily mortgaged and have heavy fixed charges to pay, but there are many that do not owe a dollar and have made a great deal of money on the prices that have ruled during the past year, and will be soon able to increase their stacks, and some are now, and it is these that are moving in the matter of putting up additional stacks. They argue that the present time is the auspicious moment to put them up; they can probably get their machinery much cheaper now than in the future; that their experience in working our ores and coal enables them to now put up plants that will be even more successful and more profitable than those they now have; yet they are very reticent about all these facts being published to the world. As a general thing I have been very conservative in all my views touching the future of the South, and there have been a great many things said that have been of the booming order, but when I see facts I cannot fail to feel that the South in the next 10 years will advance more, much more, than she has in the past 10. Right now there are hundreds of men of capital, some of them very large capital, who are going over the South quietly taking up favorable locations for the manufacture of iron, and there are hundreds of such locations yet left, and when they get the land secured will then go ahead. The course they then pursue is to furnish money in abundance to start the place by erecting manufactures of all kinds and simply just going ahead, and when so started the multitude, like a flock of sheep, follows. While Birmingham is an extreme case, yet there is many a place that the promoters of will get their money back and several hundred per cent. in addition, while at the same time those who settle there will do well, from the fact that nature has put right at their doors everything else of which iron and wood are cognate parts. Of course there will be ups and downs. The town of — I do not think could have been worse managed— parsimonious, short-sightedness and antagonism have prevailed from the very commencement—yet it will come out beyond question, in consequence of its location, if they do not absolutely kill and strangle it while other places get so much the start as to attract the attention of investors to such a degree as to throw a cloud over it, and it simply die a natural death, as has been done in similar cases in the past.

You have doubtless noted the cases of the failures of some of the Southern furnaces, and the fact has been used by some parties to the prejudice of the iron-making business of the South; in fact, this was mooted by some of Carnegie's men on their trip South (not by Carnegie himself), whom I met in Birmingham; but when the plain facts are brought out it is no reflection whatever. In every single case where a failure has occurred there are two reasons for such failure (either one of which would bring a failure about). One is an entire insufficiency of working capital, and the other is ruinously bad management, and when both are combined what else could be expected.

I have lately taken several trips South, visiting nearly all the principal trade centers, and having had dealings with nearly all the iron and hardware men and foundries, they talk with me very freely, and I am very frank to say that in the thirty years' knowledge of the South put altogether, I have never felt concerning the prospects of the future career of the South as I do now, from the observations that I have made during the last 30 and 60 days. The Southern people are seeing more than ever the effects of personal energy and application, and are stripping themselves for the fight, and, to use a common expression, are "wading in." Not that they are averse in the least to utilizing any and

all the assistance and money that they can get from the North, for there is nothing mean about them in that respect, but the assimilation now with all and every one that comes from the North with money in their pockets and gloves off is perfect. They have but one aim, and harmony of action alone can bring that about.

## The States and the Railroads.

### The South's Needs.

[For MANUFACTURERS' RECORD.]

The legislatures of several of the Southern States are wrestling with the delicate problem of regulating railroads. This problem, which has taxed the talent of several Congresses, is as yet far from being satisfactorily solved, and it might, therefore, be fairly presumed that the members of general assemblies in such of the States as have not already established railroad commissions, would be slow to profess an ability to deal with the question such as our wisest statesmen have not claimed. Until quite recently the most that has been attempted by the States towards regulating transportation on railways, has been the prohibition of discriminations in rates, varying charges for long and short hauls, etc., and in some States forbidding consolidations of roads or the absorption of parallel lines. Probably the limit of safety has been fully reached, if not exceeded, in the Reagan-Cullom bill, establishing the National Inter-State Commerce Commission. That act, as amended by the last Congress, which imposed additional penalties, including imprisonment, for violations of some of its provisions, promises to fairly test the ability of the government to secure to railways and their patrons reciprocally equitable treatment.

Unfortunately, there appears to be a growing spirit of hostility to railways, notably in the West and South, which is manifesting itself in attempts to assume absolute control of the business of the roads by clothing commissions with authority to fix freight and passenger rates and other arbitrary functions. Such a commission has been established in Iowa, with the result that railway building has greatly declined in that State, train service has been largely curtailed, expenses reduced, many employees dispensed with, and the Commonwealth's progress measurably arrested. This commission was dictated by the Farmers' Alliance, and similar bodies are largely responsible for the efforts that are being made in several of the Southern States to establish commissions with like arbitrary powers.

The bill to create such a commission for North Carolina was, fortunately for the State's welfare, defeated in the Senate but by a narrow majority. The Arkansas commission bill was defeated, but the vote was reconsidered, and its fate is doubtful. Quite a number of measures hostile to the railroads, were introduced in the legislature of Alabama, but that body with rare good judgment refused them its sanction. In Florida, too, a State that owes so much of her growth to her railroads, a like hostile sentiment is becoming prevalent. The proposed Texas commission, however, has provoked the most widespread discussion. The Dallas News, the Galveston News, the Fort Worth Gazette, and, in fact, most, if not all, of the most potential journals of that Imperial commonwealth are uncompromising in their opposition to the proposed commission, and back their judgment with an array of facts and figures and a wealth of reasoning that should convince the sincere advocates of the measure of its unwisdom. Indeed, the same may be said of the representative newspapers of the South in general. Public sentiment in the cities and growing towns of the South is largely averse to arbitrary control of the railroads, since such regulation is

fraught with menace to the industrial future of this section.

Fundamentally such control is impracticable, even if it be conceded that it may be rightfully exercised. For, if a maximum rate be established on cotton, fertilizers, sugar, etc., which the Alliances demand, the rates on less bulky articles but of prime necessity must vary in inverse ratio to the former accordingly as the charges on bulky freights depart from those now fixed, if the railroads are to be permitted to earn anything for their stockholders.

Again, there is no just basis of comparison upon which to establish rates. Rates that would be very remunerative in the populous Eastern States, with their limited areas, would be simply ruinous in the sparsely peopled and extended States of the South and Southwest. Thus the gross earnings of the Texas Pacific Railroad in 1887 were, in round numbers, \$5,000,000, while those of the New York Central, with nearly the same mileage, amounted to over \$35,000,000. The net earnings of the Pennsylvania railroad in 1887 were greater by more than \$2,000,000, than the net earnings of all the railroads in Texas, although the latter had a larger mileage. No account is taken in the foregoing comparison of relative cost of equipment, operating expenses, etc. The Galveston Dallas News has interviewed representative citizens of many callings in all the cities and leading towns of Texas, and the advocates of the commission are found to be in a very small minority in all these centers of industry. Indisputably, there is a strong sentiment among the farmers in favor of the commission, but it springs from mistaken judgment. It is thought that the bill will be defeated in the State Senate. Should it by any possibility become a law, the progress of the Lone Star Commonwealth would cease to be the imperial march of the past decade.

It behooves the South to send level-headed, practical men to her legislative halls. Demagogues carp at capital in all its modes of investment. They lash the millionaires, but they are wontedly at the millionaires' "option" at reasonable figures. Money in motion is the life-blood of industry. Capital hoarded deprives industry of its sustenance. Encourage capital by equitable assessment and tax laws, "plant" exemptions and liberal and easily available methods for obtaining charters. Railroads, factories, ship yards, mines, furnaces, foundries, roads, towns and cities supplied with well-paved and well-lighted streets, water works and sewers and the other adjuncts of modern urban existence—these are among the South's greatest needs. But her supreme necessity is diversified agriculture. This will be filled as the other needs are supplied. But the greatest factor in the growth of our country is the railroad. The single crop farmer is at the mercy of the money lender. Once his own master, as he may become with varied crops, dairy products, live stock, poultry, trucking, orchards, vineyards, etc., as the factory towns multiply, his fancied grievances against capital will disappear. But as the dupe of windy demagogues the Southern farmer is blinded to his best interests. His prosperity is involved in that of the railroads in his neighborhood. To cripple the railroads is to halt the march of progress. Regulate railway transportation as far as practicable, but do not menace it with paralysis and set us back to the days of our grandfathers.

[Happily for Texas, the commission bill has failed in the State Senate.]

LUMBER DEALERS.—Rachford & Bordages, Beaumont, Texas, want the names of leading Baltimore lumber dealers, with a view to seeing if shipments of yellow pine can be made to this market.

## The Future of the Gulf Ports.

WASHINGTON, D. C., March 9, 1889.

Editor *Manufacturers' Record*:

Before the era of many railroads the Southern ports were the principal Southern cities. But the railway gridiron has served to cook the goose of the port cities. These railways, working their way down from the chief business centers of the North and West, brought with them into the interior of the Southern States the great staples of trade which formerly came in vessels from New York and other Northern ports, or from Liverpool and London. Returning, they bore away to new markets the cotton, tobacco, turpentine, tar and other products which once formed the return cargoes of the ships which sailed into the Southern harbors. The iron horse is the enemy and the terror of the water course. He has shorn the river god of his strength. Once the rivers not only drained the earth of its surplus moisture, but they drained the land of its surplus products. The towns and the hamlets all over the South were established with a view to convenience of access to the water courses, and from every such town or hamlet might be surely traced the raft, bateau, barge or boat bearing towards the sea its burden of the product of field or forest. Thus, the citizen of the interior sent his yearly "dues of corn and wine and oil" to swell the commerce of the world and put him in contact with the throbbing centers of business activity. Now all this is changed. The railway noisily pushes its way into the hamlet or forest, and with shrill scream calls for its percentage of the annual yield.

Accordingly, the cities which once were important have lost their state and dignity. Their cotton presses are idle, for cotton no longer seeks an outlet by way of these Gulf towns. Why should it? Cannot every interior village or settlement have its own compress and send its own cotton by rail to some convenient shipping point on the Middle or North Atlantic coast? Or better still, consume it in its own cotton mills? Likewise, the big wholesale houses are closed. The pitch, the rosin and the tar come here no more. Their warehouses are empty; their wharves and docks are deserted; their glory and greatness have departed. The railways have done it.

The South is, of course, all right. She is fuller of cotton and tobacco and rice, and pitch and rosin and tar than ever before. She has added orchards and corn fields and meadows; the tempting fruits of garden and grove, the golden, sun sweetened orange and the rich-hued strawberry—fruits of the gods. More; she has gold and silver, and coal and iron, and she is becoming full of manufactures of all kinds. Her interior towns are teeming with prosperity and reveling in wealth. Yet few of these good things have come to the coast cities of the Gulf. Their desolation still remains, and the mould continues to settle upon their abandoned market places. Dry rot and stagnation and paralysis hold sway in business marts. Their business men have grown gloomy and timid and distrustful.

The lumber interest, it is true, has served to bring a new line of business to some localities, and feeble attempts have been made in others to establish coal shipping, but for all this, ruin and doubt and despondency are the rule.

Yet, the Southern ports are now about to awaken to new life and enter upon a new era. The impulse comes from without and beyond. It springs from the transformation which man is making in the natural barriers of the world. The building of the Nicaragua canal is to mark the beginning of this new era in the history of Southern and especially Gulf ports, which will lead to the restoration of



## LOUISVILLE.

## Natural Gas for Louisville—Railroad and Industrial Projects.

BRANCH OFFICE MANUFACTURERS' RECORD,

LOUISVILLE, KY., March 11, 1889.

their rank and estate. The natural radius of commercial supply extends from the gulf to the city of Denver and beyond. A vast Southern territory—half a continent—thus lies open to these ports for business conquest. Through this opportunity they may grasp again the scepter if they will.

Let us look at the map. Taking Central Australia as the point of departure and London and Greytown as points of arrival, we find the distance less by more than a thousand miles in favor of the latter named port on strictly equatorial sailing. But, if we compare the nothing which must be made by these two routes in reaching New York and London, we note that the Suez route carries us about the same distance with the disadvantage of passing by the arid shores of the Red sea and the plague-infected ports of Southern Asia and Europe, while the American route is largely in protected seas and with favoring winds and few hindrances. Altogether we are likely to find the Nicaragua route as favorable even for reaching London as that by Suez.

Thus India and the islands of the Southern ocean become tributary to our shores and the islands of Oceania are made our neighbors. The precious woods, the gums, the spices of the Orient, will all come in by this new ocean gateway. By it also will come the fabrics and the wares of China and Japan and the gems and precious metals which tempt the traveller from afar. All these things will seek our shores and help to rear the temple of our future commercial greatness. The new development will prove a commercial revolution. The tide of commerce, hitherto settling always to the Westward, will be reversed and rolled back on our shores.

The first to receive this new tide will be the gulf ports; the first to take on new developments as the result. For, why should the supplies intended for the great Northwest go to New York for distribution, thence by rail to the Westward, when the gulf ports offer facility of immediate and direct shipment over near lines of railway leading diagonally to the points of destination?

New Orleans will doubtless maintain her supremacy as the mistress of the Southern commercial system. She has the wealth and the organization required, and she has the magnificent Mississippi with the successful jetty system giving her an outlet. Her railways supply near connection with the immense territory of the Mississippi valley and Texas. She will continue her sway over her natural empire, and will largely add to her business, her influence and her power. But New Orleans is not a gulf port, she is 110 miles from the gulf, and she is to be reached only by long and expensive towages.

## GALVESTON

on the west and Mobile on the east of New Orleans, are amongst the old ports which will awake to a new existence. The former has now a large commerce, claimed to be a hundred million. This will be largely augmented with the building of the new ocean highway. Texas is of herself a king's domain, and her natural development, great under present circumstances, will be immeasurably quickened and stimulated by the new enterprise. New lines of railway will be extended into the interior and a good quota of the new tide of commerce will come into her harbor. Doubtless the latter will be improved so as to remove the dangerous character of the bar. It is now the terror of mariners. Notwithstanding it has been much worked upon by the National Government and more than half a foot added to the depth of water, vessels of 18 feet draft still wisely shun it. Shipmasters also complain of the exactions upon shipping under the name of port charges. The cost of improving Galveston harbor is enormously expensive, about \$7,000,000 being

the estimated outlay involved in making an entrance of 21 feet. Nevertheless, in 10 years this port might be provided with a deep water entrance by the expenditure of three-quarters of a million dollars annually. Who can doubt that the enterprise and energy of Texas will accomplish this?

## MOBILE.

The channel of Mobile is narrow and subject to yearly deposits of silt from the great rivers which debauch here; but the general government has been spending money generously in improvements, and as a result has secured already a depth of 15½ feet of water in the channel where before were but 12. It is estimated that with the expenditure of about \$3,000,000 a channel 300 feet wide and 21 deep might be made through the shallow bay to the gulf, nearly 40 miles away.

This port is in the line of commercial expansion which must ensue upon the completion of the great ship channel. But the business men of Mobile are many of them confessedly lacking in confidence in their own city's future, and accustomed gloomily to refer to the past when cotton was king and business and money were abundant. It is said that the balance of business of the city is now less than half what it once was, yet Mobile is to have her new life with the rest. Her business men will shake off their timidity and take hold with new courage. Her harbor will in time be improved, and she will share in the commercial revival.

## PENSACOLA.

Another port of the Gulf is about to come into commercial prominence. This port has been long the favorite haven of mariners. The city of Pensacola, through a combination of hindering circumstances, has been for years shut off from commercial development, although possessing the finest harbor on the Gulf or in the South. Hitherto timber and lumber have been her only cargoes, while vessels have brought to her wharves only ballast of stone or sand. The entrance to the port is short, easy and safe, and vessels drawing 22 feet may readily sail in at low tide and come directly to the docks. Inside the harbor is ample and perfectly land-locked, with abundant anchorage for a large fleet. Her natural facilities for shipping are in fact wonderfully fine and it is a source of surprise that she has not long since become a great shipping port for cotton, coal and all other products of the South, as well as for timber. The lack of railways is pointed to as the explanation of her possessing but a single industry, she having one road extending along the coast and none to the interior.

Pensacola is now offered her opportunity. Capitalists are looking to her as the principal Gulf port for the Nicaragua canal commerce first to enter. New lines of railway are already projected to connect her with the Northwest, and the railway magnates are holding frequent conferences regarding her future development. When one visits the place and sees more than a hundred deep draft vessels riding at anchor in the harbor at a time he gets some idea of the magnitude of the lumber interests having their outlet here, as well as of the splendid capacities of the harbor. Memphis and Kansas City are now reaching out towards this place. Natchez is building in its direction. Far interior cities, such as Denver, are looking towards it as a deep-water port.

Pensacola is almost due north from Graytown, the eastern terminus of the Nicaragua canal, and is the nearest port to enter besides being the best in the Gulf. Why should she not be the principal port to receive the cargoes seeking our shores for distribution to the West? Why should she not furnish vessels with return cargoes of cotton, timber or coal? In the near future there is great expansion in store for this admirable Gulf port. This is inevitable or all signs will be falsified.

E. W. CLARK.

Within the next four weeks Louisville will be supplied with natural gas to an extent sufficient to meet all the demands that will be made upon the pipe line. The line is now completed to the city limits and work has begun upon laying the mains through the streets. The supply from the first main will be about 30,000,000 cubic feet per day, but the Pipe Line Company are making arrangements to construct additional lines as rapidly as possible, so that before the heavy consumption of next winter begins there will be four or five lines, each bringing a daily supply of about 20,000,000 feet. There has been considerable excitement in the city for the past two or three weeks over the approach of the supply, and pipe line stock promises to become one of the popular investments in Louisville. Mt. Sterling, Ky., has also discovered an abundance of gas in its vicinity and a considerable supply of petroleum. Mr. S. B. Hench, representing the Chambers Oil Co., of Pittsburgh, has been leasing gas and oil lands near Mt. Sterling, and is preparing to sink a number of wells for the purpose of supplying Mt. Sterling with gas and secure the oil for refining purposes. The oil wells in that county were discovered more than thirty years ago, and natural gas was struck at the same time, but the value of the gas was not known then, and several of the best wells were abandoned and closed up on account of the flow of gas. These will be opened again, and it will not be surprising if this city would follow Louisville in introducing the cheap fuel in Kentucky.

A railroad project of very considerable importance to Louisville has, in the past few weeks, been placed in a position which will probably result in its realization within the next eighteen months. The Louisville, Hardinsburg & Western Railroad is projected to extend westward from this city through a very rich tier of counties between Louisville and Christian county. Col. J. C. Fawcett, president of the company, has already put engineers in the field and has collected a large force of laborers to follow them at once to construct the grades and prepare the way for tracks. Col. Fawcett displayed a great deal of energy and skill in building the Louisville, St. Louis & Texas Railroad, and he gives it as his opinion that the new road will be an equally valuable property. He has completed all his arrangements for the money necessary to build the road and equip it. The route is one very rich in agricultural products, and its opening will be of great advantage to the farmers who have now to haul their freight in wagons from twenty to thirty miles to a shipping point. The line is also rich in minerals and has a number of thriving towns and villages, which will rapidly develop under the influence of railroad facilities.

The extraordinary energy with which railroad building is being carried on in Kentucky is illustrated in the action of the two counties last week. Warren, in which the city of Bowling Green is situated, voted a subscription of \$200,000 to a new road which will be a north and south line through the State, while Paducah voted \$160,000 to two new lines, giving that city additional Southern connections. Warren county will next week subscribe \$150,000 to still another road. These counties are rich and prosperous, and their securities are as good as gold, so the subscriptions mean something. Movements are in progress to commence work on all these lines during the approaching summer, and they will add at least 100 miles to Kentucky's mileage in 1889. The possible completion of the lines has encour-

aged much activity at Bowling Green, where a number of new enterprises are taking shape, though they are not sufficiently advanced for cataloguing. A large force of Italians has been put at work on the Louisville Southern between Lawrenceburg and Lexington, and the contractors are pushing the construction rapidly. The Kentucky Union Land Co. are preparing to establish a \$100,000 lumber plant at Clay city, and negotiations are in progress for the erection of a furnace for making Red river iron for car wheels.

Statistics have just been completed showing the amount of money invested in new buildings in Louisville during the five years ending December 31, 1888. During that period there were 6,018 new buildings erected at a gross cost of \$11,313,838. For the first two months of 1889 the number of permits issued for new buildings is 105, the estimated cost of which will be \$443,450. The building season will not open fairly until next month, but it is generally conceded that building operations for the coming year will be more extensive than for any of the past five years. A large number of costly edifices are in contemplation, and building companies engaged in the erection of small residences will greatly enlarge their plans for 1889. These statistics concern only the municipality. Perhaps one-third of the amounts quoted might be allowed for buildings in the suburbs, which are practically part of the city, and which have been growing in the past two years more rapidly than ever before.

The increase in coal mining in Kentucky is significantly demonstrated in the report of State Inspector C. J. Norwood for the half year ending December 31, 1888, which is just made up. The output of commercial mines for 1887 was largely surpassed, the comparative showing being as follows:

|                    | Bushels.   | Tons.     |
|--------------------|------------|-----------|
| Output 1887.....   | 48,329,630 | 1,800,000 |
| Output 1888.....   | 60,033,077 | 2,223,447 |
| Increase 1888..... | 11,703,447 | 423,447   |

These figures do not include reports from any of the merely local mines in the State for the reason that the mining law does not provide penalties for failure to report, and very few of them are carried on his books. Yet the local mines are numerous and the aggregate of their output very large. In 1880 the census reported the total of all coal mined in the State at 950,000 tons, and it is probable that the increase since that date has been 200 per cent. The output of canal coal during 1888 was 47,825 tons. It was thought that the coal famine of the winter of 1887, caused by the closing of the Ohio river against Pittsburgh products, had given a factitious impulse to mining in Kentucky for the first six months of 1888, but the returns show that while only 29,000,000 bushels were mined for that period, more than 30,000,000 bushels were mined during the last six months ending December 31, 1888. There has been a considerable consolidation of interests, also, and while the number of mines reported in 1888 was not larger than in 1887, the operations were more extensive. A number of new mines are now being opened upon leading railroad lines, and the output for 1889 will probably be largely increased over 1888.

A movement is on foot at Elizabethtown, in Hardin county, to test the value of carrying on fruit and vegetable canning at that point, and the Commercial Club of Elizabethtown has obtained stock subscriptions necessary to establish a cannery which will be ready for operations this spring. That portion of the State which is very hilly, and in some places mountainous, has long been celebrated as one of the finest fruit-growing



regions in the West, and during the past five or six years an immense trade has been built up from the farms on the hillsides. The establishment which will be opened shortly will employ about 200 hands, and it is estimated that the produce of vegetable farms will be increased in value from \$25 to about \$60 per acre. The Elizabethtown Commercial Club are also taking steps to secure the immigration of German fruit and truck farmers for the purpose of increasing the supply of material upon which to work, and it is probable that the organization will soon develop a plan for bringing foreigners into the county. This experiment will be watched with a great deal of interest from the fact that the same idea has been much discussed in many of the counties of the State, but no steps have heretofore been taken to test the practical value of the undertaking. The middle portion of Kentucky is extraordinarily fertile, and crops can be produced of fruits and vegetables which will far surpass the value of similar crops upon any other ground in the South.

#### STATE INDUSTRIAL NOTES.

A tobacco factory, employing about forty men, will soon be established in Richmond.

A new steam cracker factory is to be established at Owensboro by parties from Evansville, Ind.

The Pine Mountain Iron & Coal Co. have let contracts for building forty new coke ovens at a cost of \$10,000.

The Henderson woolen mills pay out an average of \$50,000 yearly to girls who operate their sewing machines, which will give an idea of the large extent of the woolen business in that thriving and rapidly growing city.

Information has reached this city of the discovery of a fine quality of silver ore on a farm three miles from the village Irvine, in Estill county. Preparations have been made to sink a shaft and test further the value of the ore.

Since the Louisville Southern Railroad has been completed there has been more building in Harrodsburg than for the previous five years combined. Contractors and builders have more work on their hands now than for 1888.

The West Pineville Land & Improvement Co. have decided to build a handsome steel bridge across the Cumberland river to connect that suburb with Pineville, and a street railway will be operated to bring the two towns nearer together.

C. W. Rodebaugh, of Ohio, has located in Richmond, where he has purchased an interest of John Donnelson in his buggy factory, and they will at once greatly enlarge its capacity and draw heavily upon the hardwoods in that territory.

A strong company has made a proposition to the Board of Trustees of Georgetown to erect water works in that city and supply it with water needed for public and private consumption and ornamental fountains. It is probable that the proposition will be accepted in some form or other, and the works constructed during the present year.

Mr. Geo. A. Collett contemplates at an early day establishing at Bowling Green the largest brick kiln ever erected in this State to furnish brick for the roundhouses of the Henderson & State Line and Bowling Green & Northern Railroads, and also to meet the demand for brick for numerous other buildings which are to be erected in that city in the near future. It will be an enterprise of vast proportions.

A large number of German immigrants entered the State last week and will settle near Milledgeville, in Lincoln county, in the vicinity of which there are already two Austrian colonies which have been very successful and profitable. The opportunities for fruit raising and truck farming in Lincoln and Hardin counties are exception-

ally fine, and in a few years this section could be made among the most valuable lands in the State.

Rice & Co., who established a tobacco manufactory in Hopkinsville a year ago, have been so successful that they are now enlarging their works considerably. They have taken a large brick building, and are putting in the latest and best machinery to manufacture chewing and smoking tobacco on a large scale. Christian county is the largest tobacco-raising county in the United States, and, in addition to that, is situated in the heart of the famous Western tobacco district. These advantages have no doubt contributed to the success of the company during the past year, and their enlargement will perhaps induce other investments in the same direction. YOUNG E. ALLISON.

#### Industrial Progress at Florence.

FLORENCE, ALA., March 9, 1889.

*Editor Manufacturers' Record:*

Florence is situated on a plateau elevated 169 feet above the Tennessee river. It is rolling and thoroughly drained. It has pure freestone water, and a very salubrious climate, being beyond, also, the yellow fever field of invasion. It has increased in population to the extent of more than doubling itself in three or four months. There has been planted there within a few months past an almost unprecedented number of industrial enterprises—the most important of which are established in substantial brick buildings with substantial stone foundations—showing that they have come to stay. Among these enterprises there are one completed iron furnace, and one in progress on which has been expended already \$30,000; one lock factory from the North whose fine brick buildings cover and are to cover several acres; a large stove factory; a cotton compress; a hose factory; a drug factory; a suspender factory; a boot and shoe factory; a factory for corn and cotton agricultural machinery; and various factories in wood work, such as sash and blinds, furniture, dish factory, etc.—all inviting and justifying the large increase in population and values which have taken place so rapidly here. While it is unfortunately impossible to keep out speculators, in such conditions, yet the promoters of the town profess to make this their honest effort. They desire earnestly to see an increase of population and values, based only on a progress *pari passu*, with the increase of industrial development.

Nature has done all for Florence needful for the demands of a large city, and the judicious and conservative co-operation of man cannot fail to realize this desirable result.

For cotton mills there is no more desirable situation in the whole South. Situated in the midst of the cotton belt, with illimitable water power from the Tennessee river on the one side, and from Cypress creek on the other, with two railroads running into it, another under construction, and with deep water navigation, placing it in communication with the whole system of the Mississippi river and its tributaries, it cannot fail by reason of the cheapness of securing the raw material, of its manufacture, and of its distribution to the markets of the world to be the chief center of cotton manufacture.

For the manufacture of iron its situation is exceptionally fine, situated about 20 miles south of the finest iron ore in the country, if we except the Bessemer ores of Lake Superior; and having a railroad under construction to tap and traverse this ore bed, covering hundreds of thousands of acres; and only about 30 miles north of the great Black Warrior coal belt, the facilities for iron manufacture, considering the quality of the cheaply accessible ores, is unprecedented.

JNO. M. PATTON.

#### Newsy Notes from Mississippi.

[Special correspondence MANUFACTURERS' RECORD.]

ABERDEEN, Miss., March 9, 1889.

The following were the shipments of lumber from the port of Pascagoula for the week ending March 7th:

| To                               | Feet.     |
|----------------------------------|-----------|
| Buenos Ayres, South America..... | 2,228,312 |
| Greenock, Scotland.....          | 835,120   |
| Havana, Cuba.....                | 328,346   |
| Montevideo, Uruguay.....         | 456,475   |
| Rosario, South America.....      | 676,284   |
| Key West, Florida.....           | 220,000   |
| New Orleans, Louisiana.....      | 50,000    |
| Total for the week.....          | 4,795,147 |

Of the vessels loaded for foreign ports one was British, six were Norwegian and only one American, and among the arrivals of other vessels under charter during the week for lumber freights, five were Norwegian, one German, one Russian and one American. Of course, the vessels in the coasting trade carried the American flag.

The Tombigbee Cotton Mills, of Columbus, though only in their first month of operation, last week received an order from an Oregon firm for all of the domestics they can supply up to the middle of April.

Hancock county on our South coast, like Monroe county in the prairie and Issaquena in the delta, and probably a number of other counties in the State, is entirely out of debt. Each of these counties has a considerable surplus in its treasury, Issaquena having about \$11,000. The taxes in that county will be very light this year, and it may not be necessary to levy any at all for county purposes.

Summit opened its first bank on the 5th inst. under very flattering auspices.

The Bank of Rosedale, at Rosedale, the county seat of Bolivar county, opened last week, with a capital of \$50,000.

Greenville has just completed a new hotel, the St. Charles, containing 83 excellently lighted, ventilated and furnished bed-rooms, and is well built and equipped throughout.

The contract for building the new courthouse of Bolivar county, at Rosedale, was last week awarded to J. F. Barnes, of Greenville, at \$29,950.

Out of \$9,619.19 of State taxes assessed in Tate county, all was paid except \$50.64, and the deficit was chiefly due to erroneous assessments.

Out of a population of 5,000, the official report for the city of Columbus shows but two deaths during the month of February. This will give your readers an idea of the healthfulness of the Mississippi prairies.

Under the auspices of the ladies of the Methodist Church South, of the State, a beautiful bishop's residence has been erected at Jackson, and Bishop Galloway moved into it last week.

The Merchants and Farmers' Bank of Macon, in Noxubee county, last week increased its capital stock from \$25,000 to \$50,000. This bank, though only seven months old, declared a dividend of 6 per cent in January, and accumulated a surplus of \$3,500 from its January and February business.

A \$15,000 hotel has just been completed at Tupelo, in Lee county.

Work was commenced at Natchez on the 5th inst. on the New Orleans, Natchez & Fort Scott Railroad, and the understanding is that it will be pushed forward rapidly to completion.

Mrs. Helen J. Powers, C. H. Mulholland and J. H. Roach, of Vicksburg, and several St. Louis parties have established a branch of the Vicksburg Cotton-seed Oil Works in the Missouri metropolis.

The list of lands sold in Hinds county for the delinquent taxes of 1888 was smaller than that of any other year since the war.

Mayor Charles H. Smith, of Georgia, (Bill Arp,) writes as follows to Gen. S. D. Lee, president of the Agricultural and

Mechanical College of Miss.: "In my travels I have met with young graduates of your institution in charge of farms and creameries who were practically honoring their alma mater. A friend of mine has abundant means to sustain such plans as his brain and energy may suggest. A good man will find a good place in his employ. If you have such a man to send out you will please notify him of the fact."

This grand institution of which Secretary of Agriculture Coleman wrote "it comes fully up to my ideal of what an agricultural college should be," has supplied from its halls a large portion of the faculty of the Texas Agricultural and Mechanical College, and other institutions of like nature, and inasmuch as it was the first college in America to establish a chair of dairy husbandry, its students and graduates are to be found in charge of creameries, dairies and stock farms all over the South and West, and its influence is destined ere long to make Mississippi the leading dairy State in the Union. You will remember that Ex-Commissioner of Agriculture Loring, of Massachusetts, called Mississippi "the natural home of the Jersey cow."

#### Virginia's New Town.

BUENA VISTA, March 7, 1889.

*Editor Manufacturers' Record:*

The Buena Vista Co. is actively engaged laying out the town. Nearly 4,000 lots are sold and will be deeded to purchasers as fast as four or five competent corps of engineers can lay them out. The company will build a \$20,000 hotel for present use, on a beautiful rising ground overlooking our valley of Eden, where the new city is being built. The name is to be "Buena Vista," (beautiful view.) If nature, which had the making, had had the naming, she could not have found one more appropriate. But the big thing at Buena Vista is business, and the materials which make business. An enormous bed of ore has recently been discovered, which analyzes 59.020 iron, with only .175 phosphorus, 2.900 silica and a trace of sulphur. It is near the town and railroads, and can be laid down at our furnaces at less than \$1.00 per ton. This we can prove to any one who will come and look at it. There is, we think, nothing like it in the South, and we challenge comparison. This ore lies in enormous masses, which are not guessed at, but can be seen with the naked eye, walked over, handled. You can fall over it, climb over it, get all around it, (by going five or six miles.) It is magnificent. The company has taken steps to develop its manganese, which promises to be a second Crimora. We are on the same western base of the same Blue Ridge mountain, and the geological conditions are the same, and the out-crop of manganese is very abundant. Several large iron plants are in immediate prospect.

B. C. MOOMAW.

THE Popular Science Monthly for April will contain a scientific explanation of the power to ensue the human mind possessed by the leading delusion of the present day. The article is by Prof. Joseph Jastrow, and is entitled "The Psychology of Spiritualism." It contains accounts of the manifestations by the Fox sisters, Dr. Slade, Englington and other mediums, all of which have been proved to be gross intentional fraud throughout.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.



### Creosoting Works at Wilmington, N. C.

Mr. F. C. Prindle, C. E., engineer and superintendent of the Carolina Oil & Creosote Co., Wilmington, N. C., in a letter to the MANUFACTURERS' RECORD, says:

"This company has recently been reorganized to meet the necessity for conducting the business on a more intelligent and scientific basis; and to enable us to give to the antiseptic treatment of timber that careful consideration and attention which its importance demands, we have secured the services of a corps of experts in connection with the scientific part of the business, and intend sparing no pains to improve our machinery, our processes and our products, in every way possible under the new management.

We have already entered upon the enlargement of our oil manufacturing plant of 16 oil retorts to double its present capacity, and shall soon have four large creosoting cylinders in operation, thus doubling our entire capacity for turning out creosoted lumber and enabling us to handle large orders with facility and despatch.

We are also arranging to use nothing but the refined heavy creosote oil for treating timber, from which the light oils which

over, paraffine being a stable substance, unaffected by acids or alkalies or scarcely anything save a considerable degree of heat, makes it a valuable constituent of preserving fluids used for the impregnation of timber. None of those properties are found in the so-called dead oils of coal tar, which also vary greatly in quality."

### Binghamton Water Motors.

Water motors are becoming one of the most efficient and economical means of power from  $\frac{1}{2}$  to 15 horse-power and upwards. A motor which does the greatest amount of work with the use of smallest stream, and which is most adapted for running, both cheaply and efficiently, printing presses, elevators, church organs, coffee mills, sewing machines, lathes and dental contrivances, and, in fact, any piece or mechanism. The Binghamton water motor has many superior points. It can be used either as a single or double motor, an arrangement which secures a higher working power from a smaller stream of water than in any other case. This saving of water is obtained by the arrangement of a combination of jets, any one of which may be shut off and another opened without stopping or interfering in any way with the speed of the motor. For example, by



BINGHAMTON WATER MOTOR.

come over from the stills in the process of distillation under a specific gravity of 0.975 have been extracted; or, rather these light oils are taken off as they come over and not permitted to mingle with the heavy oils which follow, as was the former practice.

These light oils are specially and separately treated and used for other purposes in the arts for which they are more valuable, the creosotes only being eliminated and recovered to still further enrich the heavy creosote oils retained and used only for creosoting purposes.

By this process we shall be put into possession of by far the best creosoting and preserving fluid yet discovered for the preservation of wood for all purposes.

It has been long known and acknowledged by chemists that the true creosotes are only derived from wood by destructive distillation, and later researches have shown the wood creosote oil obtained from yellow pine to possess the property of absorbing oxygen from the air and drying or resinifying so as to produce a hard, water-repellant and wear-resisting surface when applied to porous woods. It also contains paraffine, which has a chemical property or tendency to crystallize out after impregnation and so more closely fill the pores and exclude the entrance of those germs which produce decay. More-

this ingenious contrivance a motor which has the capacity for running three printing presses may, if the use of only one press is required at a certain time, run the single press without wasting the extra quantity of water required for running all three by simply closing the extra jets. This is a brief explanation of the method by which a high rate of power is secured from the use of a very small quantity of water, as is the case with the Binghamton motor. They are made of the best material only, and work noiselessly, with the least possible friction. They are constructed for permanency, and for purposes mentioned are cheaper than steam power. This motor is so constructed that it is always ready for use, never out of repair, and may be worked in the parlor or work-house without dirt or noise. It will not freeze. For table of horse-powers, prices and further information address Binghamton Hydraulic Power Co., Binghamton, N. Y.

**SAW MILL MACHINERY.**—One of the most interesting and timely of recent trade publications is the illustrated catalogue of the Edward P. Allis & Co., Reliance Works, Milwaukee, Wis. It is elegantly printed and illustrated, and will prove of great value to lumber men in want of machinery. The company supply everything requisite in saw mills in the shape of machinery, whether manufactured in their works or elsewhere.

### CIRCULAR OF THE

## Buena Vista Land & Improvement Co.

On the 10th day of January, 1889, the Buena Vista Co. was organized. At a public meeting of citizens held in Lexington, Va., on the 22d day of January, the subscription books were formally opened. On the 31st day of February the books were closed with \$750,000 capital stock subscribed by the people of our county and State. On the 14th day of February the first annual meeting of the stockholders was held, and the permanent organization of the company effected by the election of a president and nine directors.

#### LOCATION.

This company has acquired 13,000 acres of land on or near the western slopes of the Blue Ridge mountains, at the junction of the R. & A. and S. V. railroads in Rockbridge county, Va. This tract embraces: 1st. The celebrated Buena Vista estate, which is beyond comparison the most valuable mineral property in the South. It embraces 11,500 acres, covering five miles of the Blue Ridge mineral belt, and contains the most extensive beds of the richest brown hematite ore in the South. It also contains apparently large deposits of manganese.

2d. The Green Forest and Hart's Bottom tracts, embracing about 1,500 acres of beautiful level and gently rolling land, lying immediately on North River and the two railroads above mentioned. This tract immediately adjoins the largest Buena Vista ore beds, and furnishes in connection with that property a site for a manufacturing city which has no superior in the country. It not only commands the vast beds of Buena Vista ore, but is the center of a mineral region within a radius of 30 miles and penetrated by the railroads centering here, which in respect to the quantity, quality and variety of valuable ores, as well as other raw materials, is without parallel.

#### IRON ORE.

We append the following description and analysis of ores by Prof. M. B. Hardin, of the Virginia Military Institute, and challenge comparison:

LEXINGTON, VA., February 19, 1889.

To the President and Directors Buena Vista Company, Lexington, Va.:

GENTLEMEN—At the request of Colonel W. M. Patton I herewith give you the results of analysis of Buena Vista iron ores made from time to time in this laboratory:

| In 100 parts.  |                        |        |
|--|------------------------|--------|
| Metallic iron.....   | 59.000                 | 54.580 |
| Phosphorus.....  | .175                   | .184   |
| Silica.....  | 3.300                  | 7.310  |
| Sulphur.....   | traces                 | .016   |
| Phosphorus to 100 parts iron.....  | 0.296                  | 0.337  |
| Number 6 was sent at my request and selected according to my directions. Number 5 is an exceptional specimen, a complete analysis of which gave the following results: |                        |        |
| Iron sesqui oxide.....   | 84.31                  |        |
| Alumina.....   | 10.80                  |        |
| Lime.....  | 1.38                   |        |
| Magnesia.....  | .18                    |        |
| Manganese oxide.....   | .17                    |        |
| Cobalt oxide.....  | .05                    |        |
| Nickel oxide.....  | traces                 |        |
| Copper oxide.....  | traces                 |        |
| Zinc oxide.....  | traces                 |        |
| Phosphoric anhydride.....  | 0.40                   |        |
| Sulphuric anhydride.....   | traces (not detected.) |        |
| Silica.....  | 3.30                   |        |
|  | 99.98                  |        |
| Metallic iron.....   | 59.000                 |        |
| Phosphorus.....  | .175                   |        |
| Silica.....  | 3.300                  |        |
| Sulphur.....   | traces                 |        |
| Phosphorus to 100 parts of iron.....   | 0.296                  |        |

I have been often asked how a "limonite" carrying silica and other impurities could contain 59 per cent. or even over 60 per cent. of metallic iron, when a pure typical limonite contains only 59.9 per cent. of the metal. The apparent difficulty arises from a confusion of terms. All brown iron ores are not limonite. Goethite, which resembles limonite, contains 62.9 per cent. of iron, and turgite, which though reddish, is still a hydrated oxide, contains 66.50 per cent. of iron. I may make this matter still clearer by stating that limonite contains 54.4 per cent. of water, goethite 10.1 per cent. and turgite only 5.3 per cent. As turgite very frequently occurs with limonite, as goethite closely resembles the latter, and as iron ore originally deposited as limonite may have subsequently lost some of its water, it is very easy to see how brown iron ores may exist which contain more iron than the brown hematite, properly called limonite.

From what I know of the Buena Vista ores, I think specimen No. 6, taken from "stock heap," is a fair representative. This contains 0.337 phosphorus to the 100 parts of metallic iron, which is equivalent to about 0.31 phosphorus to 100 parts of pig iron. An analysis of a specimen of pig iron from Buena Vista ores showed in 100 parts 93.03 metallic iron and 0.38 phosphorus, a result agreeing pretty closely with that calculated from the analysis of specimen of ore averaged from "stock heap."

In 1886 I made a number of analyses of specimens of Buena Vista ores for Mr. J. H. Bramwell, of the New York Iron & Steel Company. These specimens were collected by Mr. Bramwell himself, and the analyses afford the means of comparing the composition of the ores taken from different beds and openings.

Very respectfully, M. B. HARDIN.

Also analysis by Prof. Andrew S. McCreath, of Pennsylvania:

#### PERCENTAGE OF IRON, &c.

|                         |        |
|-------------------------|--------|
| Metallic iron.....      | 54.350 |
| Metallic manganese..... | .309   |
| Sulphur.....            | .016   |
| Phosphorus.....         | .195   |

In reference to the extent of these ores, we quote from the report of Prof. John Campbell, late Professor of Geology in Washington and Lee University: "We believe that 10 miles is not an extravagant estimate of the bed of ore, and these beds vary from 5 to 60 feet in thickness, and average at the lowest possible estimate 8 feet in width. The quantity of ore is practically inexhaustible. All of these extensive ore beds are easily approached and inexpensively mined." The actual average yield of this ore in the Amberst furnace, where it was exclusively used, was 53 per cent., or 1,000 pounds of iron from 2,000 pounds of ore. The product of this furnace was a high grade of warm blast foundry iron, used in the manufacture of car wheels. It was made at a cost of \$14 per ton, and sold in the beginning of January, 1889, at \$19 50 f. o. b. here. It is estimated by men of practical experience in the iron business that coke iron of superior quality can be manufactured at this point and laid down in the markets at an average maximum cost of \$18 per ton. The cost of producing a ton of coke iron at Green Forest has been computed as follows:

|                                     |        |
|-------------------------------------|--------|
| Two tons ore at \$1.00 per ton..... | \$2 00 |
| 134 tons coke.....                  | 3 64   |
| Limestone.....                      | 40     |
| Labor.....                          | 1 75   |
| Incidentals and repairs.....        | 1 00   |

Total..... \$8 79

Leaving an actual profit, through a long period of market quotations, of at least four dollars per ton.

#### RAILROAD FACILITIES.

The Shenandoah Valley and Norfolk and Western Railroads, under the same management, gives us a direct line to the Pocahontas or Flat-top coal fields. The Richmond & Alleghany and Chesapeake & Ohio Railroads, under the same management, gives us a direct line to the New River and Kanawha coal region. The Baltimore & Ohio gives us a direct line to the Connellsville coal and coke region. The Baltimore & Ohio and Shenandoah Valley Railroads are direct and competitive lines to the Northern markets. All of the roads here mentioned compete to supply coke and carry away products. The advantages of such a position cannot be over-estimated.

#### FUEL.

From the foregoing it can be readily seen that no other point in the South can command coke of such superior quality in such abundance, or at less cost.

#### LABOR.

A plentiful supply of reliable white labor can be obtained at this point. The great predominance of the white population precludes the possibility of race troubles. The few colored people we have here are peaceable, contented and much more reliable than others of the same race in Southern communities. Surrounded by a rich agricultural region, the cost of living here is reduced to a minimum.

#### CLIMATE.

No other part of the world can boast of a climate so well adapted to industrial pursuits. In winter the temperature rarely falls to zero. In summer it rarely rises to 90. We have neither blizzards nor cyclones. No destructive storms; no serious epidemics or any of the other extreme visitations peculiar to Northern, Southern or Western sections. Our pure, high, dry, healthy and equable climate conduces to the best of health, and furnishes the energies and opportunity for continuous out-door labor.

#### PURPOSES OF THE COMPANY.

The Buena Vista Company proposes to develop its magnificent ore beds with great energy; to promote the establishment of furnaces, mills and factories of all kinds, and to build a busy manufacturing city, which shall be second to none in the State. As no other point can compete in natural advantages, the company is in a position to offer more attractive and valuable inducements than any other corporation in the South.

Capitalists and manufacturers from the North and West, and representatives of every industry from every section are all invited to find at Buena Vista a congenial, healthy, comfortable home and a profitable field for investment and labor. Any one desiring to invest in any kind of manufacturing enterprise will find at Buena Vista all that he could desire in the way of first-class facilities and the greatest variety and abundance of raw material, together with such special and valuable inducements as the company will offer. For further information address

**A. T. BARCLAY,**

President Buena Vista Company, Buena Vista, Va.



# The Premium Mineral and Timber County OF THE STATE OF VIRGINIA IS WYTHE.

Awarded by the Exposition at Richmond in 1888.

The Best Mineral, Timber and Agricultural County Unoccupied by the Railway and Manufacturing Capitalists in the Appalachian Chain.

WATER POWERS ACCESSIBLE AND CONVENIENT TO ALL THE GREAT BODIES OF MINERAL AND TIMBER.

Health Excellent at an Elevation of 2,300 Feet Above Sea Level. Ores and Minerals in the Greatest Profusion and Variety.

IRON ORES—BROWN, RED AND MAGNETIC—Occupying 110 Square Miles of the County's Territory. Manganese in immense Deposits. Zinc and Lead, the Largest Deposits in the World. Semi-Bituminous Coal occupies 25 Square Miles of the County's Territory.

Limestone for Fluxing and for Lime in Purest Qualities Known, the Decomposition of which Makes the Finest Soil for the Production of Grain and Grasses.

MINERAL WATERS OF SUPERIOR EXCELLENCE, with Established Reputation of Many Years, such as Lithia, Bromide Arsenic, Sulphur, Chalybeate and Alum.

## ★ SPLENDID AGRICULTURAL FACILITIES. ★

Native Blue Grass, Luxuriant Growth of Timothy and Clover. Average Yield of Wheat 15 Bushels to the Acre; Average Yield of the State 7 Bushels. The Highest Yield of Corn to the Acre 105 Bushels. Finest Location for Creameries in the South.

The Timber Lands of Wythe County Unexcelled for the Character, Quality and Production of its Hard Woods, such as White Oak, Hickory, Walnut, Poplar, Pine, Hemlock and Ash. Large Forests of Splendid Car Lumber White Oak.

### A SUMMER RESORT

2,300 Feet Above Sea Level.  
Pure Oxygenated Air, Broad  
Streets, Fine Pavements,  
Mineral Waters.

# WYTHEVILLE,

### THE COMING Winter Sanitarium

OF THE SOUTH.  
Dry Atmosphere, Tempered  
Winds, Pure Water, Macadam-  
ized Streets, Turnpike Roads,  
Mineral Waters.

★ VIRGINIA. ★

## "THE SARATOGA OF THE SOUTH."

### AN ALL THE YEAR-ROUND RESORT.

With its present capacity cannot accommodate the crowds of summer visitors. Hence, to secure a large modern hotel the town council will donate a site containing ten acres of land, beautifully situated, with commanding views of surrounding mountains, and perfect drainage, to any person who will build one.

The town is situated on the summit of the Alleghanies, 2,300 feet above tidewater, 133 miles from Lynchburg, 71 from Bristol, Tenn., and on the line of the Norfolk & Western Railroad, midway between New York and New Orleans. Population 3,000. No better place situated for a summer and winter resort.

Its air is pure and invigorating. During the summer months a pleasant mountain breeze cools the heat of midday, and a blanket is requisite for comfort during the night. It is recommended by eminent physicians to those suffering with consumption, catarrh, dyspepsia, nervous prostration and insomnia.

It is beautifully laid off in squares, with wide streets, many of which are macada-

mized and adorned with spacious yards. It is the center of a network of country roads, all affording delightful drives for health and recreation. It is situated in the famous blue grass region, and the grass is of spontaneous growth.

It contains an ever-flowing fountain of excellent alum-chalybeate water on Main street, especially recommended for dyspeptics and delicate ladies and feeble children, free to all. Within a few miles is the celebrated Cove Lithia Springs, specially noted for its curative powers. Limestone and Freestone Water can be had in abundance.

Its church, school and collegiate facilities are superior to those of any summer resort in the State.

**FREE FROM MALARIA. FREE FROM MOSQUITOES. FREE FROM CYCLONES. FREE FROM EPIDEMICS.**

19 Hours From New York. 12 Hours From Washington. 37 Hours From New Orleans. 24 Hours From Memphis. 20 Hours From Louisville. 12 Hours From Nashville. 24 Hours From Savannah. 15 Hours From Atlanta. 6 Daily Trains. 1 Telegraph Office. 2 Banks. 1 Insurance Company. 2 Weekly Papers.

ADDRESS

**C. W. GLEAVES, Mayor.**

# WEST POINT, VA.

## Deep Tide-Water Terminal Town

of the great Richmond & Danville Railroad System and of the railways controlled by the Richmond & West Point Terminal Co., including the East Tennessee, Virginia & Georgia Lines.

## MATCHLESS HARBOR, INCOMPARABLE CITY SITE.

HEALTHIEST PLACE BETWEEN NEW YORK AND GALVESTON.

Purest drinking water, most salubrious climate on the South Atlantic Seaboard. No mud in the streets. No malaria in the air. Lighted by electricity. Excellent schools. Churches of all denominations.

## Extraordinary Inducements for Manufactories.

All new industries exempt from taxation. **Factory Sites Donated.** Fifteen hundred and sixty per cent. increase in the value of improved property since 1880. Six hundred per cent. increase in population. West Point has never been "boomed" and but little advertised, consequently building lots may still be had at lower prices than prevail at many towns of half the size and one-tenth the present business of West Point. Last year West Point was the fifth cotton port in the Union. Next season it will be the second, for by then the Missouri Pacific will turn over its Arkansas Indian Territory & North Texas cotton to the Richmond & Danville's new line now being built to the Mississippi River.

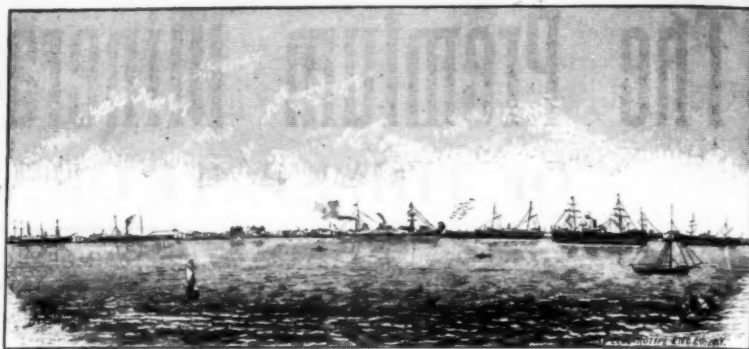


THE TERMINAL HOTEL, WEST POINT.

This alone will quadruple the value of West Point property. Lots are now offered at from \$50 to \$1,000, so as to meet the views of purchasers of every class.

Only 30 miles from Richmond: a night's ride by palatial steamers from Baltimore (fare only \$2) within easy reach of Philadelphia, New York and Boston. Steamers from Baltimore daily. Tri-weekly "Old Dominion" steamers from New York. Semi-weekly line steamers from Providence, R.I.

Come and see the town and its great docks and sea-going steamers loading for foreign ports. Come and drink the health-giving water flowing from any one of West Point's 150 artesian wells.



STEAMSHIPS LOADING COTTON AND GENERAL CARGO AT WEST POINT.



MAP SHOWING WEST POINT VA AS THE TERMINUS OF THE

Richmond & West Point  
Terminal System  
of Railroads.

Persons desiring further accurate details are requested to address  
**THOS. B. HENLEY, West Point, Va.**

GENERAL AGENT FOR THE

## Richmond, West Point Land, Navigation & Improvement Co.

FOR SALE.

**FARMS,**

Timber Tracts,

**MILLS,**

West Point Property

BOTH

Improved and Unimproved.

**THOMAS B. HENLEY,**

× Real Estate ×

**Broker and Auctioneer.**

FOR RENT.

**FARMS,**

Store Houses,

**MILLS,**

Houses and Lots

—IN—

**WEST POINT.**



# DECATUR, ALA.

**POPULATION.**—In March, 1887, 1,200; in July, 1888, 7,000; an increase of over 500 per cent. in sixteen months.

**TRANSPORTATION.**—Thirty navigable rivers will be accessible by steamers from the wharves after the completion of the government works at Mussel Shoals, on the Tennessee river, in 1889. Two trunk lines of railroad are in operation at Decatur—the Louisville & Nashville, and the East Tennessee, Virginia & Georgia systems; and two more are in course of construction.

**MANUFACTORIES.**—There are already in operation, or nearly completed, forty manufacturing enterprises that will employ at least 3,500 skilled workmen. These will warrant a population of 20,000 in the near future.

**HEALTH STATISTICS.**—Death rate last year only 11 per 1,000 among the whites.

**IRON.**—The best grades of charcoal pig iron can be manufactured here at a cost not to exceed \$11.50 per ton.

**COAL.**—Coal for manufacturing purposes is now delivered in Decatur, by rail, for \$1.60 per ton. In a few months the mines up the river will deliver coal for about \$1.25 per ton.

**TIMBER.**—The finest timbers in the world are on the banks of the Tennessee river, adjacent to Decatur. Decatur is one of the largest hard wood producing centers in the South.

**SCHOOLS AND CHURCHES.**—Good school and church facilities are here already.

**FARMING LANDS.**—Decatur is the center of one of the finest agricultural regions in the South. The Tennessee valley produces all kinds of small grain, potatoes and fruits, as well as products characteristic of the South, such as cotton, tobacco, etc.

## Review of Decatur's Growth up to July, 1888.

The following enterprises have been located in Decatur and New Decatur, Ala., since February 1, 1887, (with few exceptions) and are in full operation, except where otherwise stated:

1. The Decatur Land, Improvement and Furnace Company was organized on the 11th day of January, 1887, and has laid out the town adjoining Decatur, known as New Decatur.
2. The Louisville & Nashville Railroad Company are now (July, 1888), completing their extensive new shops for the manufacture and repair of cars and locomotives; also roundhouses, etc., the whole covering 57 acres. It is estimated that these shops will employ 1,500 men.
3. The United States Rolling Stock Company are moving their extensive car shops from Urbana, Ohio, to Decatur, where they are putting up new works, covering 49 acres, for the manufacture of every description of cars. The machinery will be in place by September, 1888. The company will employ 500 men at first, and eventually 1,000.
4. The Decatur Charcoal & Chemical Works, running 48 ovens of a capacity of 55 cords of wood each, each cord producing two gallons of wood alcohol, 50 bushels of charcoal and 125 pounds of acetate of lime. This plant has a capacity to treat about 50,000 cords of wood per annum.
5. The American Oak Extract Company, the largest plant of the kind in the world, consuming 100 cords of wood daily in the manufacture of tanning extract. The plant is now being increased by one-third.
6. A 70-ton Charcoal Iron Furnace, nearly completed and ready for operation, built by Gordon, Strobel & Laurean, of Philadelphia, on the latest improved designs. Cost \$111,000.
7. The Decatur Iron Bridge Construction Company, an immense plant with admirable machinery for building every description of railroad and other iron bridges.
8. The Ivens & Son Machine Company. Building (brick) 280 feet by 100. Manufacture boilers, engines, etc., and do all kinds of foundry work.
9. Cotton Compress (Morse, 90 inch.) built by Steers & Co., of New Orleans. Cost \$75,000, completed. The buildings are of brick and iron with stone foundation and have the largest storage capacity in the South.

10. The Decatur Car Wheel & Manufacturing Company. Capacity, 100 wheels per day at present; will be increased as fast as possible, as the company cannot now supply their orders.

11. Southern Horseshoe Nail Factory. These extensive works are being constructed, and will shortly be in operation.

12. Decatur Waterworks (both direct pressure and Holly system) now being constructed by Howland & Ellis, of Boston, Mass. There will be 38 miles of pipe, of which over one-half are laid already. The water will be turned on about September next, and Decatur will have an unrivaled water supply.

13. Moulthrop & Stevens' mammoth brick yard, occupying over 7 acres and employing 50 men, their steam machinery having a capacity of 75,000 brick per day. There are five other brick yards in Decatur, and brick can be furnished at the present time at from \$5 to \$6 per thousand.

14. H. S. Freeman's lumber mills and lumber yard. Daily capacity of mill 15,000 feet. Handles 2,500,000 shingles yearly, besides laths.

15. Arantz Brothers' saw mills and lumber yards. Operate 3 band-saws. Daily capacity of their mills 60,000 feet.

16. Decatur Lumber Company's saw mill, planing mill and dryer. A very large establishment.

17. Berthard & Company's sash, door and blind factory.

18. The Hoosier Mills & Building Company.

19. The Southern Lumber Company. Make sash, doors and blinds.

20. J. D. Jervis & Company's extensive factory for sash, doors, blinds, stairs and hardwood finish.

21. Decatur Builders' Supply Company's lumber yards and planing mills.

22. Decatur Artificial Ice Company; capacity 6 tons daily, to be increased shortly to 15 tons.

23. Decatur Cornice & Roofing Company; manufacture galvanized iron cornices and iron and tin roofing.

24. The Decatur Street Railway, running cars over 3½ miles of track. Will have 2½ miles more completed shortly. Is equipped with new rolling stock.

25. The Decatur Telephone Company, operating over 80 stations.

26. The Decatur Electric Light Co., running 30 arc lights (Brush system).

27. Grant & Company's furniture factory.

28. Decatur Building Association.

29. Bucheit's Bottling Works.

30. Decatur Printing Company.

31. Artificial Stone Works.

32. Decatur Plumbing & Supply Company.

33. Alabama Lumber & Fruit Package Company.

34. Decatur Carriage Company.

35. First National Bank. Paid up capital \$100,000.

36. Exchange Bank of Decatur. Capital \$100,000.

37. One daily and two weekly papers.

38. The new "Tavern" Hotel, in full operation, owned by the Decatur Land Improvement & Furnace Company, delightfully situated on their own grounds, magnificently furnished by the Robert Mitchell Furniture Company of Cincinnati, Ohio, with room accommodations for at least 125 guests. There are five other hotels in Decatur.

39. The Decatur Land, Improvement & Furnace Company's incandescent electric plant, furnishing lights to the "Tavern," also to stores, offices and private dwellings.

A block to contain an opera-house, stores and offices, is now being built by a joint stock company at a cost of \$60,000.

The Louisville & Nashville Railroad Company handle daily in their depot yards 640 cars, 360 going South and 280 North; employ 85 men, and pay out to employees \$6,000 monthly.

The East Tennessee, Virginia & Georgia Railway Company handle in their yards 150 to 200 cars, employ 14 men, and pay out in wages \$720 per month.

In March, 1887, the number of inhabitants in Decatur was 1,200; in March, 1888, 7,000 in Decatur and New Decatur. Since January, 1888, there have been over two hundred houses erected; many of them are substantial brick business houses.

The Decatur Land, Improvement & Furnace Company is offering most favorable terms to parties who will purchase lots for the purpose of building homes.

The capital stock of the company, by retirement of the treasury stock, is reduced to 50,000 shares, or \$5,000,000, of which 45,659½ shares have been issued and are now outstanding. It is largely held as an investment by small holders scattered through different States, very many of whom have also bought property in Decatur, and by persons engaged in business and various occupations in Decatur.

The strong financial condition of the company can best be appreciated by a perusal of its published statements of July 1st, 1888, a copy of which can be obtained from the secretary at New Decatur, Alabama.

For Maps, Illustrated Pamphlets, and Specific Information, address

## The Decatur Land, Improvement & Furnace Company

NEW DECATUR, ALA.

# SHEFFIELD, ALA.

The Iron Manufacturing Center of the South.

At the head of navigation, on the Tennessee River, Sheffield is the **natural outlet** for the mineral and manufacturing products of Alabama and the neighboring States seeking a water route to points on the Ohio and Mississippi Rivers, and to the Gulf of Mexico, as well as the best **distributing point** over Alabama, Eastern Mississippi and East Tennessee, South Carolina, Georgia and Florida for Northern and Western produce, groceries, provisions, machinery, &c. Three Railroads already completed and in operation, and several others assured. **Principal shops of the Memphis & Charleston Railroad**, in which cars and locomotives are to be built, are under contract to be erected here. These will employ between **four hundred and five hundred mechanics** and consequently, with their families, will make an increase in population of at least two thousand people. Shops of three other railroads are contracted to be located here, some of them being now under construction.

## Five Completed Blast Furnaces,

HAVE A CAPACITY OF 700 TONS PIG IRON PER DAY.

Experts do not hesitate to say that iron can be manufactured more cheaply at Sheffield than at Birmingham, and its river transportation facilities will enable Sheffield iron to reach the principal markets at a saving of from

**\$2.00 TO \$2.50 PER TON.**

The quality of the Iron produced is pronounced by consumers to be the best from any furnaces in the South.

### The following are among the Corporate and Private Enterprises belonging to Sheffield:

- |  |   |  |
|--|---|--|
| 1 The Sheffield Land, Iron & Coal Company, capital \$1,000,000.  | 14 The Sheffield Mineral Paint Company, \$50,000.     | 35 Knowles Knitting Mill, \$30,000.                    |
| 2 The Sheffield & Birmingham Coal, Iron & Railroad Company, capital \$7,500,000, owners and operators of three blast furnaces, the Sheffield, the Sheffield & Birmingham Railroad, coke ovens and coal mines near Sheffield. | 15 The Sheffield Agricultural Works, \$40,000.        | 36 Sheffield Tapestry Works, \$40,000.                 |
| 3 The Sheffield Furnace Company, capital \$150,000; assets \$500,000.  | 16 The Sandstone Quarry Company.                      | 37 Robbins Machine Shop and Foundry, \$50,000.         |
| 4 The Lady Ensley Furnace Company, capital \$200,000.  | 17 The Sheffield Cotton Compress Company, \$60,000.   | 38 Sheffield Cotton Mill, No. 1, \$50,000.             |
| 5 Enterprise Publishing Company, capital \$25,000; publishes daily paper with associated press report and weekly paper.  | 18 Millar Brothers, Steam Laundry.                    | 39 Owen Pink Mixture Company, \$100,000.               |
| 6 The Electric Light and Gas Fuel Works, \$25,000.   | 19 Water Works, already expended \$30,000.            | 40 Bell Telephone & Telegraph Company.                 |
| 7 The Sheffield Ice Company, capital \$25,000.   | 20 Sheffield Street Railway Company, \$50,000.        | 41 Fould's Shoe Factory, \$20,000.                     |
| 8 The Sheffield Manufacturing Company, \$30,000.   | 21 Sheffield & Tusculum Street Railway Co., \$50,000. | 42 Enterprise Wood-working Company, \$30,000.          |
| 9 The Sheffield Contracting Company, \$60,000.   | 22 First National Bank, \$100,000.                    | 43 The Sheffield Harness & Saddlery Company, \$20,000. |
| 10 The Eureka Brick & Lumber Company, \$30,000.  | 23 Cleveland Hotel Company, \$50,000.                 | 44 Principal Shops of the Sheffield & Birmingham R. R. |
| 11 The Sheffield Furniture Manufactory.  | 24 Sheffield Hotel Company, \$120,000.                |  |
| 12 The Howard & Busch Brick Company.   | 25 East Sheffield Land Company, \$500,000.            |  |
| 13 The Sheffield Bakery and Bottling Works.  | 26 Hull & Keller's Fern Quarries.                     |  |
|  | 27 Vorhees' Galvanized Iron-Cornice Factory.          |  |
|  | 28 The Sheffield Quarries.                            |  |
|  | 29 Mobile Real Estate Company, \$50,000.              |  |
|  | 30 Sheffield Real Estate Company, \$125,000.          |  |
|  | 31 Sheffield & Mobile Improvement Company, \$100,000. |  |
|  | 32 Sheffield Stove Works, \$50,000.                   |  |
|  | 33 Henderson Milling Company, \$100,000.              |  |
|  | 34 Globe Iron & Brass Works, \$10,000.                |  |

Aside from the foregoing, the following are in course of construction and may be considered positive: Principal Shops of the Nashville, Florence & Sheffield Division of the Louisville & Nashville Railroad.

Reasonably certain to be secured in the near future are the following, in regard to which negotiations are pending: A Rolling Mill, a Large Machine Shop, a Cotton Mill, a Large Steel Plant.

## GOOD WATER.

### Free Public Schools and Churches

Drainage Excellent. Health and Climate Unsurpassed.

Splendid Opening for Men of Push and Energy.

No Better Point for Profitable Investment.

— NO "OLD FOGY" ELEMENT HERE. —

### Sites for Manufacturing Enterprises,

AND FOR FREE PUBLIC SCHOOLS AND CHURCHES,

Donated by Sheffield Land, Iron & Coal Company.

Population January 1st, 1887, 700; August 21st, 1887, by actual count, 2,583. Increase of population, 300 per cent. in eight months, and only limited by accommodations. Present estimate (August, 1888) fully 3,500. Four years ago the site of Sheffield was cultivated as corn and cotton plantations, and was without a railroad. Numerous two and three story brick business houses, and one and two-story dwellings have been, and are being erected. The class of buildings will compare favorably with those in cities of 20,000 inhabitants. Limestone of excellent quality for fluxing iron in unlimited quantities at the furnaces' sites. First-class building stone and brick clay abundant. Rich and extensive deposits of Brown Hematite iron ore within twenty miles, along the lines of two Sheffield railroads, which, by actual results in the furnaces, yield above 50 per cent. metal. Iron of high grade is being made with a pound of coke to a pound of metal—a result never before accomplished with Southern ores and coke. The Sheffield & Birmingham Railroad runs through the heart of the Warrior Coal Fields, which abound in first-class Coking, Steam, Gas and Grate Coal. Timber is abundant and cheap. The Memphis & Charleston Railroad, Sheffield & Birmingham Railroad, and Nashville, Florence and Sheffield branch of the Louisville and Nashville Railroad are now in operation into Sheffield. Surveys of three other railroads have been recently completed to Sheffield, which will soon be the best combined river and railroad transportation center in the South. Every merchant and every established manufacturing enterprise is doing a profitable business. More are needed. For further information address

WM. L. CHAMBERS, Vice-President and Manager,

**SHEFFIELD LAND, IRON & COAL COMPANY, - - - SHEFFIELD, ALA.**



**Special Friction Pulley.**

We illustrate this week a new friction clutch pulley designed for places where space is limited and where very slight movement of the clutch is allowed for the transmission of power from the pulley to the shaft. Fig. 1 shows all the parts sepa-

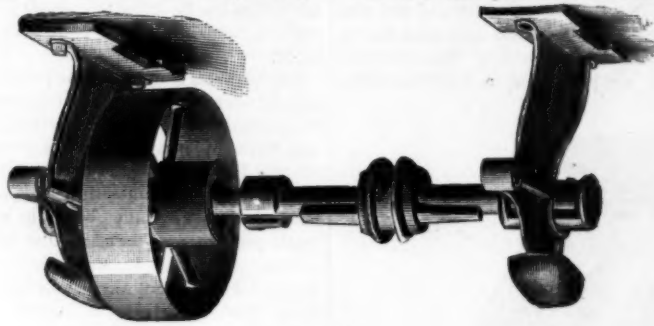


FIG. 1.

rated. The hub of the pulley is counter-bored; an expansion ring having a taper slot is pinned to the shaft, and the counter-bore of the pulley is placed over it; the sliding clutch collar carries a tapered wedge fitting the slot in the expansion ring; the wedge always rests in the slot, and a very slight movement expands the ring and gives a strong grip. Fig. 2 shows a fric-

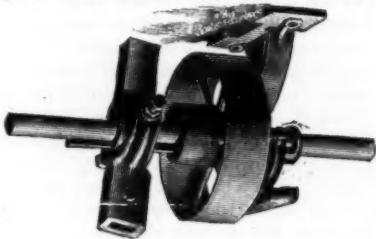


FIG. 2.

tion in place on a shaft in operation. The principal features of this clutch are its simplicity, being of few parts easily made, its consequent low price and durability. For further information and prices apply to Jones & Rogers, mechanical engineers, Cincinnati, Ohio.

**Combination Foot Press.**

The foot press illustrated herewith is intended for use in small shops where the amount of work is limited, yet is too great to be economically done by hand. It is a recent production of the Ferracute Machine Co., Bridgeton, N. J., and is known by the name of press 245. All kinds of work usually sold in a country shop can be made on it. It has an open front bed which allows 14 by 20 inch blanks to be cut and to drop through it, and the flat bolster is furnished so that smaller dies can be used. For wiring or curling the edges of pans, etc., after they are put together, the "sunk bolster-plate," shown set in press, is used, and it is provided with a sliding-plate, so that large deep work can be pulled forward and removed from the dies easily. It will wire or curl any work up to 14 inches deep and 14 inches diameter. For smashing the side seams after parts are hooked together the horn-bolster is used in connection with horn dies. This press has an adjustable fulcrum, and is equally well adapted for light or heavy work.

The press is especially adapted for cutting, wiring and seaming pieced tin-ware, etc., but can be used equally well for such work as the cutting of heads and bodies of petroleum, varnish and meat cans, dust pans, stove-pipe elbows, coal-hod bodies, powder kegs, lard pails and other tin sheet metal blanks not over 14 by 20 inches. It can be adjusted to various angles, the guiding slots in the legs being of such a shape that the front of bed remains at same height whatever the

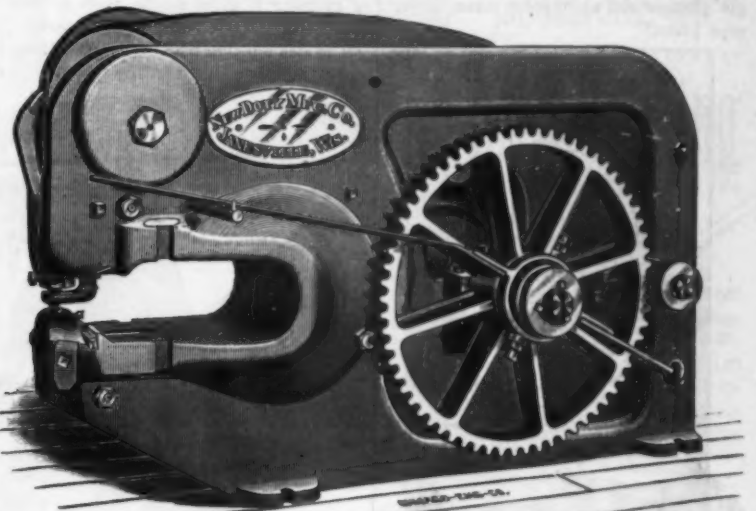
amount of inclination. It has steel die-clamps, adjustable treadle stop and other improvements. The lever and treadle being balanced, press works as easily as many smaller ones. Full sets of bushings, extensions, wrenches, etc., are furnished with each press, fitting the machine for work of a variety of sizes. The extreme

height of press is five feet; distance back from center of slide-bar 19 inches; width between the die-clamps 27 inches; height from bed up to bottom of slide-bar, including adjustment, 49 inches; maximum stroke of slide-bar either 1 or 2 inches, depending on whether fulcrum pin is in forward or back hole. The total weight of press is about 2,700 pounds.

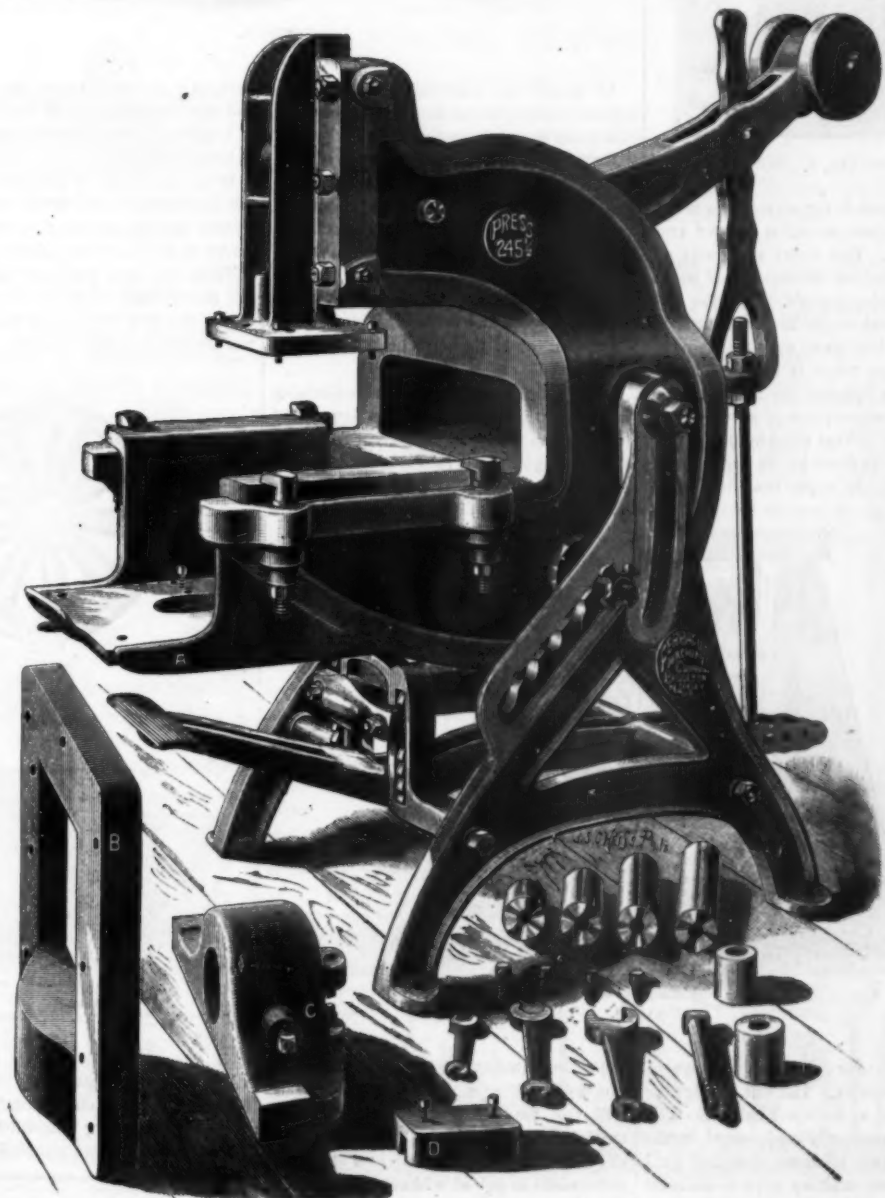
**New Belt Power Punch.**

The illustration shows a new belt power punch made by the New Doty Manufacturing Co., of Janesville, Wis., in 10 sizes, for the use of boiler makers and sheet-iron workers. These punches are all from improved patterns, and vary in weight

machines all shafts, bolts and plungers are of steel. Machines are well made throughout. They are strongly back-geared. Punches and dies can be adjusted to the machine without stopping balance wheel. They have tight and loose pulleys, and are all supplied with their improved stripper, which is capable of being adjusted to



NEW BELT POWER PUNCH.



COMBINATION FOOT PRESS.

ADVERTISERS wishing to reach the manufacturers of all classes, mining companies, steel, iron and hardware dealers of the entire South, cannot find a better medium than the **MANUFACTURERS' RECORD**,

from 150 to 10,000 pounds. They vary in capacity from the smallest size, which will punch a  $\frac{1}{4}$ -inch hole in  $\frac{1}{4}$ -inch iron to the center of 4 inches, to the largest size, which will punch an inch hole in  $\frac{1}{4}$ -inch iron to the center of 74 inches. In these

1-1000 of an inch. The distance from center of the punch to the front of the machine is but  $\frac{1}{2}$  of an inch; they can therefore be used for punching flanges.

Subscribe to the **MANUFACTURERS' RECORD**,

### Clay-Working Machinery Specialties.

The accompanying cuts represent several improved special clay-working machines manufactured by Alex. K. Rarig & Co., Columbus, Ohio.

Cut. No. 1 represents an improved single plunger rod and spider steam sewer-pipe press.

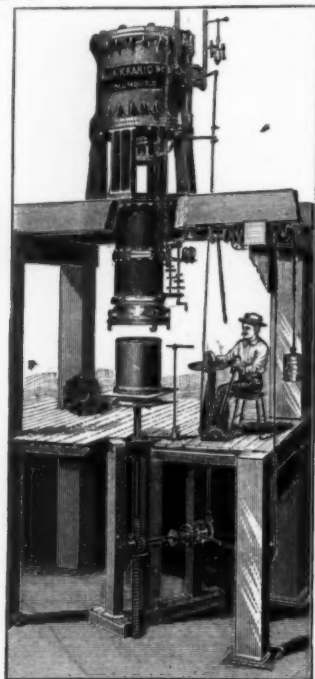


FIG. 1.

The entire press is supported by a heavy cast-iron bed plate which is dressed true on both sides. The lower side rests on timbers provided for the support of press. The clay cylinder proper, being the one the plunger works in, is firmly secured to under side of bed plate, making it a very desirable feature when it becomes necessary to remove cylinder for repairs, without disturbing other parts of press.

The steel spider that supports the center die and cut-off is fitted to the lower cylinder, which is made larger than the upper clay cylinder so as not to contract the

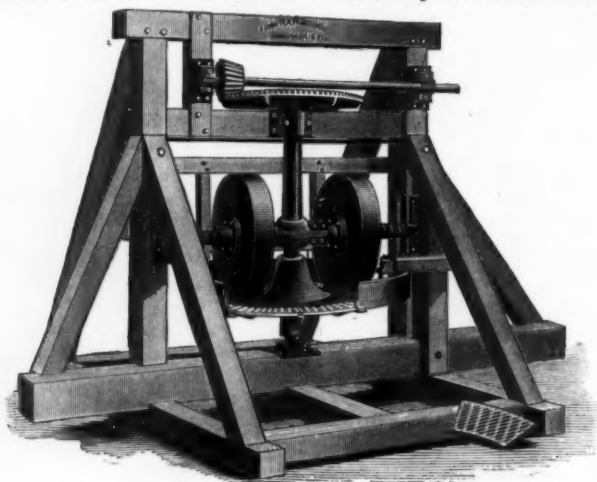


FIG. 2.

capacity of plunger cylinder by the spaces taken up by spider. The cut off rigging is all connected to the lower cylinder. The knife rod is necessarily made short by the use of the steel spiders; dies are held firmly in place, making pipe a uniform thickness throughout, which is difficult to accomplish with long die shaft.

The columns to support the steam cylinder are faced true to an even length, and are bolted to corner of bed plate and cylinder head with turned bolts; the holes for same are reamed when cylinders are lined true, thus preventing any possibility of getting out of line, and enables any intel-

ligent person to put them together. The lower steam cylinder head is turned true on both sides, and extends into the bore of cylinder, which necessarily lines them together. The plunger rod is made of hammered steel. The clay plunger is secured to end of rod by means of screw cut on end of rod and in plunger; when out of cylinder it gives ample room to feed press either by hand or with press feeder.

The steam piston packing is self setting, and peculiarly adapted for heavy work.



FIG. 3.

In quality of material, workmanship, capacity, strength and correct proportions, this press has no superior.

Cut No. 2 represents an improved dry pan and wood frame. This pan and frame is constructed with a view to having it complete within itself, so that it can be set in any place most convenient for the work required, without any reference to the solidity of the building, as it is entirely separated from any connection with other structure, and thereby being self contained.

The upright shaft that carries the table is made large and strong; the lower end rests on an improved step, carrying the entire weight of all movable parts of the pan. It can be readily seen that the step is the vital part of the machine. Several

age any one can be replaced and at a small cost.

The crusher wheels are made with false hub and tires when desired. The width of tires runs from 8 inches to 14 inches, as may be required. These pans are made with wood frames complete, or the pans separate, as may be desired.

Cut No. 3 represents a dry and wet pan combined in one frame, making a strong and convenient structure. The construction of wet pans is the same as that of dry

pan, except that no screen plates are used, and the crushing wheels run from 6-inch to 7-inch face, the diameter being the same as that of dry pans.

When the frame is furnished complete, the machinery is all fitted to frame and plainly marked, so that they can be readily set up by any ordinary mechanic.

These dry and wet pans have no rival for pulverizing clays of all kinds, shale, sandstone, iron ore, and in fact any material that can be pulverized. Prices fur-

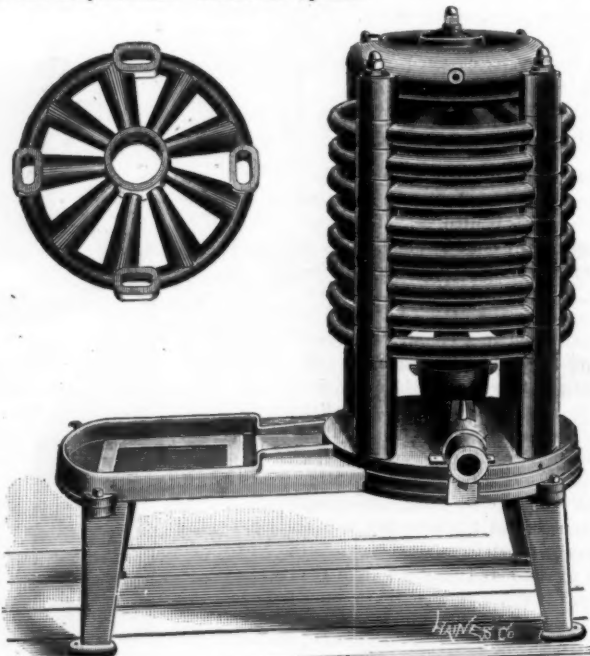
### The Patent Sectional Boiler.

The accompanying illustration exhibits the patent sectional boiler, manufactured by the Rochester (N. Y.) Machine Tool Works, Limited, to be used with their Acme stationary engine, as it appears when the jackets have been removed. It also shows the fire tube for the oil fire in position, and one single section of the boiler.

The advantages of using the patent sectional boiler are several and noteworthy. First among these is the important claim that it cannot be exploded. The record of the past two years, it is said, shows that it consumes only from one-fifth to one-half as much fuel as any other boiler in which hydro-carbons are burned. One of the secrets of success in using hydro-carbons as fuel is that there should be no forced draft, and that the intense flame and heat should be baffled back by water or steam surface until the heat is nearly all absorbed. These hydro-carbons will make all the draft that is desirable by the force of their own flow.

A large ring or dome on the top of the boiler affords an ample supply of well-dried steam. The water supply is maintained by a pump worked directly from the main shaft, which forces the water through a coil heater, where it is subjected to the effect of the exhaust steam before entering the water leg of the boiler. By this means the feed water is heated to near or above the boiling point before entering the boiler, without in the least choking the exhaust or being contaminated with the cylinder oil or other deleterious substances.

The supply of water to the feed pump is regulated by a ball float in a case attached to the boiler, which, by means of levers, controls the amount delivered at each revolution of the engine, and may be adjusted to maintain the level of the water in boiler desired, under all the varying loads to which the engine may be subjected.



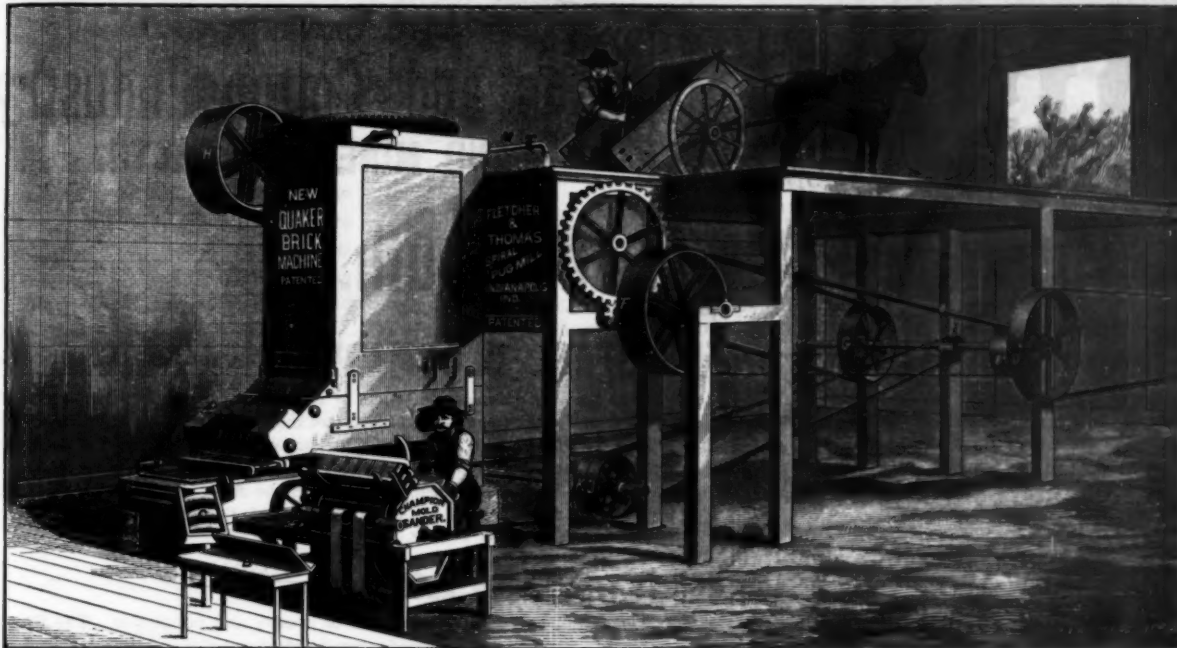
PATENT SECTIONAL BOILER.

nished on application to the manufacturers, who invite correspondence concerning clay-working machinery, engines, boilers, shafting and punches and shears.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

An upright tubular boiler in Buffalo, N. Y., that gave good results when fired with coal, was fired with natural gas, 5,000 feet of which it used to do its work every ten hours. After it was replaced with the patent sectional boiler, the record of 18 months shows that the average consumption of gas was not over 1,000 feet during ten hours, and did more work than was ever done by the old boiler. These boilers are made in sizes of from one to four horse-power each, and thus give a fine range for selection in the propulsion of smaller or larger machinery. For further information apply to the company at Rochester, N. Y.





**Fletcher**  
and **Thomas,**  
INDIANAPOLIS, IND.

## Brick Making MACHINERY.

Steam Power, capacity 30,000 to 40,000 per day. Horse power, 15,000 to 20,000 per day. We contract to furnish, erect and start everything complete, including power if desired. Send for illustrated catalogue giving full particulars.

## Chambers' Brick Machinery



10,000, 25,000, 50,000 per day Capacity.

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CHAMBERS BROS. CO., Philadelphia, Pa.

**FREY'S NEW BRICK AND TILE MACHINE**  
40,000 PER DAY  
With Self-Loading Trucks  
THE VERY BEST  
Engines and full Factory OUTFITS  
from 1 to 20 inches 13 styles CLAY CRUSHERS  
Machines with or without Crushers. 6 different Brickmachines.  
Address THE FREY-SHECKLER COMPANY, BUCYRUS, O.

**BRICK-MAKER'S SUPPLIES**  
TRUCKS, MOLDS, BRICKS, & MACHINES  
G. W. RAYMOND & CO.  
DAYTON, O.



Send for Illustrated Catalogue.

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## Henry Martin Brick Machine Mfg. Co.

LANCASTER, PA., U. S. A.

Manufacturers of the Latest and Most Complete Brick Machinery, both Steam and Horse-Power, and SUPPLIES FOR BRICK YARDS. Plans and Estimates Furnished for Fully Equipping Brick Yards at Short Notice. Write for 1899 Catalogue. Mention this paper.

## FOR THE LATEST IMPROVED AND MOST RELIABLE LINE OF BRICK MAKING MACHINERY

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REFERENCE—We are now supplying nearly every Brick Machine on the market.

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Firms with pay rolls of  
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FROM DRY OR SEMI-DRY CLAYS.

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Machinists, Founders, Engines, Shafting, Pulleys, &c.

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WE TEST ALL CLAYS SENT PREPAID FREE.

## Wardwell Stone Channeling AND Quarrying Machine.

WILL pay for itself in a short time in reduced cost of getting out Stone. Has no equal for efficiency and economy of operation. Pronounced by those who have used it the best machine for the purpose in the world. Send for illustrated catalogue, with full descriptions and letters from parties now using the machines.

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# Anniston

THE CENTER OF  
Iron and Cotton Industry  
AND MINERAL WEALTH.

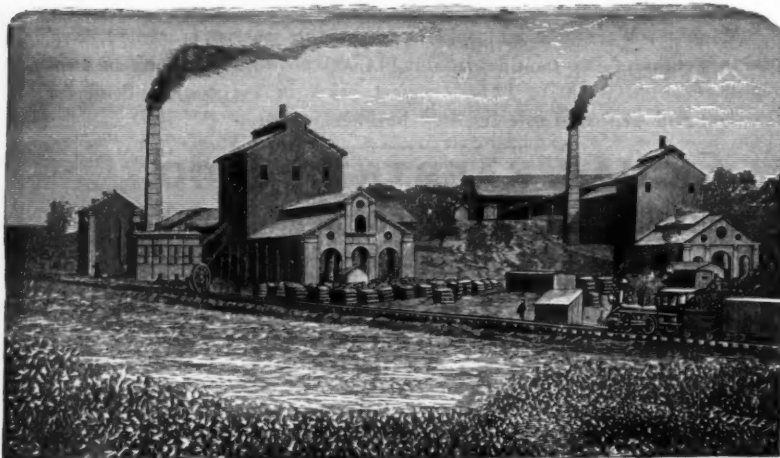
"The Model City of the South."

## IT IS

The Profits of Labor only that can add to the wealth and prosperity of a nation or community. It is this only that can make business successful and profitable, sustain and add to the value of real estate.

## WHERE

Nature's resources are greatest, where nature's capital in rich agricultural lands, and where iron, coal and other useful minerals are most abundant, most accessible and of superior quality for all purposes, there will capital find its safest investment, largest returns and labor reap its richest reward. It is to the Anniston District where the best professional mining engineers and experts of the United States declare the great center of the Iron Industry of the South will drift, where its manufacture will be most permanent and profitable, and where ores in the greatest abundance and accessibility exist, and where they will be most easily mined, that this applies.



WOODSTOCK FURNACES—ANNISTON.

## The Development of the Past Fifteen Years

Confirms all this, and every year convinces the experts of the correctness of their judgment. It is no longer opinion based on scientific and practical education; it is a fact that is clearly and successfully demonstrated, so that the visitor to the Anniston District can see at every step. The four iron furnaces that have been so long and successfully operated, and the new plant now being erected, and rapidly approaching completion, which will be capable of producing one hundred thousand tons of pig iron a year, demonstrate that

## NOWHERE ELSE IN THE SOUTH

Has the iron industry been so profitable and so successful, or been established on so permanent a basis, and of no district is this so universally conceded by all, while nowhere else have arrangements been perfected and already established on so complete a scale to work the crude iron into higher branches of manufacture to increase its value, and to bring into the district the profits of skilled labor. **THE GREAT CAR WHEEL WORKS OF NOBLE BROS. & CO.,** their rolling mill and steam forge and machine shops, and the Alabama Car Works, have been absorbed by the

## UNITED STATES ROLLING STOCK COMPANY,

With a capital of \$4,000,000, for the purpose of adding to and enlarging the entire plant to build **TWENTY CARS A DAY.** Everything that goes into the creation of a car, except the tin for the roof and the wire nails, will be created from Anniston's crude material by her labor and skill. Fifty tons of wheel iron will be made into car wheels daily, twenty tons into car axles, fifty tons of pig iron into car and other castings, and fifty tons into bar iron and bolts, making nearly ten thousand dollars per day added to the wealth of the country by profitable labor converting nature's capital to the use of man. This company have a capital of \$4,000,000, and their Anniston works will represent a cash outlay of \$1,000,000. One thousand skilled mechanics will be employed as soon as the great enlargements under way can be completed.

## THE STEEL BLOOMARY

Consumes and increases the value of twenty tons of pig iron per day, while the Pipe Foundry converts to the use of man **TWO HUNDRED TONS OF PIG IRON PER DAY** in one of the largest and best planned and most convenient labor-saving works on this continent. *The Foundry of Murray & Stevenson, Engine and Machine Works of Pinder & Co., and Boiler and Sheet Iron Works of J. & D. Noble,* all add to the consumption of crude material by the creation of finished work.

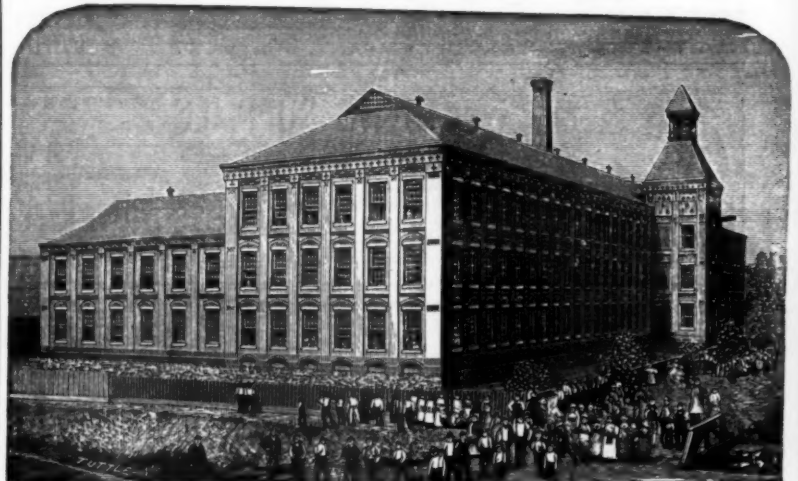
## NOR IS IT TO IRON ALONE

That Anniston relies for increase of wealth and population. The Cotton Factory, with eleven thousand seven hundred spindles and three hundred and seventy-five looms, employing over three hundred and fifty operatives, adds greater value to the products of agriculture by converting six thousand bales of cotton into cotton cloth. The immense ninety-inch Morse Cotton Compress, with its brick warehouses, is fast making Anniston a cotton market and commercial center, and aiding its wholesale and retail merchants to extend and hold the trade of the country tributary to Anniston that its system of railroads has opened to them. The Georgia Pacific, the East Tennessee, Virginia & Georgia Railroad systems,

## Give Direct Communication and Through Rates

To all parts of the country, while the Anniston & Atlantic Railroad, built by Anniston capital to open up new agricultural and mineral resources, gives Anniston, by connection with the Central of Georgia system, communication with the Atlantic sea coast and the new Anniston & Cincinnati Railroad, built and owned by Anniston citizens, opens up new resources and connections, and a shorter line with the great Northwest.

The proposed extension of the Anniston & Atlantic Railroad to Blocton will give another and shorter line to the great Cahaba Mines, producing the very best coal for domestic and manufacturing purposes in the South. Forty thousand acres of these coal lands, upon which a million and a half dollars have been lately spent in opening new mines and building several hundred coke ovens, **ALL OWNED AND CONTROLLED BY ANNISTON CAPITAL,** and developed to mine and manufacture three thousand tons of coal and coke per day, secures to Anniston for generations to come a full and certain supply of cheap fuel for all her industries, operated where a rich agricultural country can feed a manufacturing and commercial people, and where the



ALABAMA MANUFACTURING COMPANY'S COTTON MILL—ANNISTON.

## Best, Healthiest and Most Invigorating Climate in the World,

With mountain air and pure water, and an elevation of nine hundred feet above tide water, insures the health and comfort of the workman and his family; where health and comfort stimulate and lighten labor, and secure to it and its industries the reward due to both. It is these advantages which have been given by nature that enabled Anniston's citizens to create her past and present prosperity, and which secure her future. It is that they may participate in and avail themselves of these advantages that Anniston invites **NEW CAPITAL AND TALENT AND ENERGY** from all sections. We invite all to come and see, and on the spot to judge for themselves of Anniston's great resources and possibilities. The comfort and quiet of the famous Anniston Inn will make a visit to our city a treat and pleasure. Any information, attention and courtesy will be given and shown by addressing or applying to the

**ANNISTON CITY LAND CO., Anniston, Ala.**



# CONSTRUCTION DEPARTMENT

**PUBLISH, every week, a list of every new factory, of whatever kind, projected anywhere in the South; every railroad undertaken, and every mining company organized. This information is always fresh, and, by enabling manufacturers to correspond with the projectors of such enterprises before their supplies of machinery have been purchased, is of great value. Manufacturers will find it to their interest to read this department carefully each week.**

\*Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

†In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

## ALABAMA.

Alabama—Cotton-seed Oil Mill.—Percy McGeorge, Bullitt Building, Philadelphia, will establish cotton-seed oil mill South, but has not decided whether to locate at Anniston or elsewhere yet.

Alabama—Rolling Mill.—The Kilmer Manufacturing Co., of Newburgh, N. Y., and Chicago, (E. E. Kilmer), previously reported as looking for a site at Florence for rolling mill, have not decided yet at what point they will build.

Anniston—Screw and Bolt Factory.—A party from Cleveland, O., is prospecting with the view to establishing a screw and bolt factory.

Anniston—Sewerage.—The city will expend this year \$100,000 for sewers, paving and guttering.

Annis'on—Hotel.—The Anniston Inn will probably be enlarged. The Anniston City Land Co. can give information.

Anniston—Car Works.—A company is being worked up to establish new car works. It is reported that Mr. Hora, superintendent Wood Department United States Rolling Stock Co. can give particulars.

Birmingham.—The stockholders of the Birmingham, Powderly & Bessemer Street Railway Co. will hold a meeting on the 8th of April to consider the issuing of \$100,000 worth of bonds for the construction of their road.

Birmingham—Jail.—M. T. Porter will receive bids for the construction of a county jail. Plans and specifications can be seen at the office of Chas. Wheelock & Son, Birmingham.

Birmingham—B. A. Rush, 2016 5th avenue, is agent for a syndicate who want to buy 500,000 acres of farming land on which to colonize German farmers.

Birmingham—Mining.—Eugene F. Enslen, B. L. Hibbard and Lewis T. Frierson have incorporated the East Tennessee & North Alabama Coal & Iron Co. for the manufacture of iron and the mining of coal. B. L. Hibbard is president of the company. The capital stock is \$200,000.

Birmingham—Furnace.—The Mary Pratt Furnace, which is being repaired, will have its capacity increased.

Davisville—Railroad.—The Tallapoosa Furnace Co., of Tallapoosa, Ga., contemplate building a branch railroad to their ore mines at Davisville.

Decatur—Electric Railway.—The Decatur Street Car Co. contemplate using electric motive power.

Decatur—Mining, &c.—The Decatur & South Mountain Mining, Improvement & Mineral Belt Railroad Co., previously reported as to build 12-mile dummy road, own 1,000 acres mineral and timber land which they will develop.

Decatur—Electric Light Plant.—The electric light company will, it is said, enlarge their plant.

Eden—Saw Mill.—J. W. Roberts, whose saw mill was burned (loss reported at \$30,000), will rebuild at once on larger scale and buy saw mill machinery.

Florence—Saw Mill.—The Lauderdale Manufacturing Co. have located on their land a \$30,000 plant, consisting of a saw mill, planing mill and a sash, door and blind factory removed from Carroll county, Virginia.

Florence—Machine Shops.—The Lauderdale Manufacturing Co. are negotiating for machine shops to cost \$100,000 and a \$50,000 buggy factory, to be established on their land.

Florence—Foundry and Machine Shop.—The machine shop and foundry previously reported to be built will be established by the Long & Jarvis Co., of Decatur, Ala.

Florence—Cotton Gin Factory.—Col. Sawyer, of Fort Wayne, Ga., will build the cotton gin and cleaner factory to be established.

Florence—Building.—W. P. Campbell & Co. will build a 5-story banking-house.

Greenville—Railroad.—The Greenville & Southeastern Railway Co. has been incorporated by M. W. Wimberly, W. W. Wilkinson, J. F. Stallings and others, with a capital stock of \$50,000. They will build the pole road previously reported from Greenville to Leon and Andalusia.

Jacksonville—Railroad.—The Jacksonville, Williamsport & Anniston Railroad Co., previously reported, expect to build 20-mile road by September 1, 1889.\*

Laverne—Fertilizer Factory.—There is some talk of a fertilizer factory being started. If anything is done Geo. A. Folmar can give particulars.

Montgomery—Cotton Mill.—The stockholders of the Adams Cotton Mills will hold a meeting on April 4th to consider the issuing of \$75,000 worth of bonds.

Oxford—Cotton Mill.—A cotton mill company with a capital of \$100,000 is being organized.

Piedmont—Canning Factory.—The establishment of a canning factory is being agitated.

Sheffield—Railroad Shops.—C. H. Hudson, general manager, states that work on the Memphis & Charleston Machine Shops, previously reported, will be commenced shortly, and that they will be larger than the Louisville & Nashville shops at Decatur.

Sheffield—Hat Factory.—C. H. Buchanan, of Philadelphia, has contracted with the Sheffield Land & Improvement Co. for the removal of his hat factory to Sheffield. W. J. Casey has received the contract to build the factory. It will have a capacity of 4,000 hats daily.

Sheffield—Knitting Mills.—The Knowles Knitting Mills will be rebuilt. Plans and specifications are being prepared.

Sheffield—Factory.—W. J. Casey has received the contract for the erection of the factory for the Sheffield Harness & Saddlery Co., previously reported as organized with a capital stock of \$50,000.

Shelby—Sewerage.—The town is being graded and sewers will be constructed. The Shelby Iron Co. can give particulars.

Shelby—Factories.—An ice factory and car works are reported as to be established. If true the Shelby Iron Co. can give particulars.

Stevenson—Industrial Town.—The Stevenson Land & Improvement Co., previously reported organized with a capital stock of \$5,000,000, has purchased several

thousand acres of land and will lay out an industrial town. Napoleon Hill, Memphis, president, and John J. Freeman, Memphis, general manager.

Troy—Laundry.—The steam laundry previously reported is being built. D. W. Branch is the proprietor.

Troy—Foundry and Machine Shop.—B. H. Ryder is building a foundry and machine shop.

Union Springs—Cotton Mill.—Efforts are being made to organize a stock company to build a cotton mill. Dr. Franklin can give particulars.

Union Springs—Axe-handle Factory.—The axe-handle factory will, it is reported, double its capacity.

## ARKANSAS.

Argenta—Brick Works.—A company has been organized by E. M. Weigel, of Little Rock, to establish brick-yards near Argenta. They have purchased machinery.

Arkansas—Saw Mill.—Washbourne Bros., Visita, I. T., contemplate moving their saw mill to Arkansas.

Camden—Electric Light and Street Railroad.—J. C. Cornish can give particulars of the electric light works and street car line for which the city has granted franchise.

Fayetteville.—The Fayetteville Milling Co. will put in small electric plant.\*

Fayetteville—Corn Mill.—The Fayetteville Milling Co. will add corn mill to their flour mill later in the year.

Forrest City—Saw Mill.—J. P. Benton and Henry Turabull will erect a saw mill near Forrest City.

Jonesboro—Natural Gas.—A company has been formed by A. L. Krewson and others with capital of \$2,500 to bore for natural gas.\*

Hot Springs—Railroad.—The Hot Springs Railroad will be made standard gauge. J. Reynolds, Chicago, is president of the road.

Hot Springs—Bathhouses.—W. L. Bancroft, of Port Huron, Mich., has received hot water privileges from the Secretary of the Interior, and will erect a bathhouse containing 40 tubs to cost not less \$25,000.

Little Rock—Granite Quarry.—The Arkansas Granite Co. are opening quarries near Little Rock.

Little Rock—Electric Light Plant.—The Edison Electric Light Co. are adding new machinery.

Jonesboro—Electric Plant.—The company previously reported as being organized by J. B. Dillon and others to establish electric plant will soon be incorporated. Expect to put in full plant within four months.\*

Madison—Saw Mill.—Mr. Binn is rebuilding his saw mill. Its capacity will be about 35,000 feet of lumber per day.

Newport—Furniture Factory.—A furniture factory will probably be built. A Stevely, of the Newport Lumber Co., can give information.

Rogers—Barrel and Stave Factory.—Michigan capitalists are prospecting with a view to building a barrel and stave factory.

Stuttgart—Institute.—The Stuttgart Normal Institute has been incorporated by W. M. Price, T. H. Leslie, J. L. Porter, J. H. Hutchinson and others, to locate an institute in Stuttgart. The capital stock is \$190,000.

Searcy—Electric Light Works.—M. G. Pettet, previously reported as to establish electric light works, has organized the Searcy Electric Light Co.\*

## FLORIDA.

Jacksonville—Piers.—M. S. Carter & Co., who have received the contract for building the large bridge across the St. John's river, have commenced work on the piers.

Key West.—The Key West Commercial Co. are building another freight shed 295x35 feet.

Key West—Tobacco Factory.—A tobacco factory will, it is claimed, be started, to employ 5,000 hands. Probably incorrect.

Kissimmee.—Hamilton Diston, of Philadelphia, has purchased 4,000 acres of land near Lake Hart, and will drain same by cutting a canal from Lake Hart to the Ekono-lockhatchie creek.

Kissimmee—Railroad.—The St. Cloud Sugar Belt road is to be extended to Narcoossee.

Kissimmee—Saw Mill.—McLane's saw mill has been purchased by H. T. Smith-Dorrien, who will increase its capacity.

Orange Park—Sugar Mill.—J. H. Parks and Ross Underwood are arranging to build a sugar mill.

Orlando—Railroad.—Grading has been finished for the extension of the Orange Belt Railroad to Sanford.

Pensacola.—A report from Pensacola states that Roswell P. Flower, of New York, and other capitalists have purchased for \$1,500,000 large tracts of timber land in Western Florida, which they propose to develop by cutting timber, clearing up, colonizing, &c.

St. Andrews—Saw Mill.—J. Schellenger will start a saw mill, and has purchased boiler and engine.

Tallahassee—Water Works.—G. W. Saxon and others, previously reported as organizing a company to build water works, will invite bids this spring or summer for artesian well, stand-pipe, five miles of main, &c.

Tallahassee—Street Railroad.—G. W. Saxon will shortly organize a company to build a street railroad.

## GEORGIA.

Americus—Railroad.—The contract for clearing, grading, etc., on the eastern extension of the Savannah, Americus & Montgomery Railroad, previously reported, has been awarded to McLoughlin & Bro., of Memphis, and Redmond & Radcliffe, of Augusta, Ga.

Atlanta—Proposals.—Proposals for street and sewer work for one, two and five years will be received by M. Mahoney, commissioner of public works, until April 1st.

Atlanta—Railroad.—The Georgia Railroad will double-track their road from Atlanta to Decatur, 6 miles.

Augusta—Cooperage.—F. W. Pike has started a cooperage factory with a capacity of 160 barrels per day.

Brunswick—Compress.—The Brunswick Compress Co. will increase their capacity and probably build another compress.

Brunswick—New Machinery.—The Brunswick & Western Railroad are putting new machinery to cost about \$12,000 in their shops. They are also erecting a paint shop at a cost of \$2,500.

Brunswick—Crematory.—The city council are considering the erection of a garbage crematory.

Cartersville—The Cartersville Furnace Co., the Etowah Co. and the Daisy Coal Co. have been consolidated and incorporated by Jos. E. Brown and others as the Etowah Land & Mining Co. with a capital stock of \$1,750,000, and privilege of increasing to \$5,000,000. They have the power to erect electric light, gas and water works, build railroads, machine shops, furnaces, &c.

Chauncey—Railroad.—The A. B. Steele Lumber Co. have purchased rails to extend their lumber road.

Columbus.—The Georgia Investment Co., previously reported, has been incorporated



by A. Wittick, S. A. Carter, W. P. Hunt, M. E. Gay and others, to deal in real estate. The capital is \$100,000, with the privilege of increasing to \$500,000.

Columbus—Furniture Factory.—A furniture factory will be started by T. W. Smith and others.

Columbus—Machine Shops.—The Georgia Steam & Gas Pipe Co. are adding new machinery.

Columbus—Hosiery Factory.—Joel Walker will establish a knitting factory and is organizing a company for that purpose.

Cordele—Barrel Factory.—J. W. Moore, of Savannah, will build the barrel factory previously reported as to be started.

Enterprise—Railroad.—The Enterprise Lumber Co. have purchased rails to extend their lumber road.

Hephzibah—Tannery.—W. D. Acton will start a tannery with a capacity of 50,000 hides a year.

Hephzibah—Variety Factory.—A stock company has been formed to start the manufacture of buckets, axe handles, spokes, rims, etc., and furniture, boxes and wooden baskets.

Kartah—Dummy Line.—Dr J. T. Roan, has, it is claimed, made arrangements to secure the necessary rails and rolling stock for the Rome, Kartah & Subigna dummy line, previously reported.

Macon—Brewery.—Northern capitalists have offered to put \$125,000 in a brewery plant if \$125,000 more is subscribed in Macon. Thos. W. Troy can give information.

Macon—Barrel Factory.—The Palmer Manufacturing Co., of Charleston, S. C., previously reported as intending to build large cooperage works, have purchased a building and ten acres of ground, and will erect extensive buildings.

Macon—The Georgia Hosiery Co. has been incorporated by Wm. T. Lang, of Macon, and J. E. Karsen, A. E. Karsen and F. E. Karsen, of the firm of Jacques E. Karsen & Bros., of New York. The capital stock is \$50,000, with the privilege of increasing to \$150,000. They will manufacture hosiery, and employ 300 to 400 hands. Have purchased most of machinery.

Macon—Elevator and Corn Mill.—Thos. W. Troy and R. H. Plant (Troy & Plant), previously reported as having purchased machinery for corn mill, will also build a grain elevator.

Macon—Railroad Shops.—The Georgia Southern & Florida Railroad Co., previously reported as to build railroad shops, have commenced work, having secured a site of 7 acres.

Marietta—Electric Light Works.—The Jenny Electric Light Co., of Indianapolis, have received contract for electric works previously reported as to be built.

Newnan—Oil Mill.—McBride & Co. will enlarge their cotton-seed oil mill this summer.

Newnan—Oil Mill.—A company is being organized to build a cotton-seed oil mill. John Westbrook can give particulars.

Putnam—Flour Mill.—Mr. Knowlton will, it is reported, start a flour mill.

Rockmart.—A company consisting of Gov. John B. Gordon, of Atlanta; W. P. Davis, of Pennsylvania, and Messrs. Sublet and Barton, of Chattanooga, and others have secured an option on mineral, timber and farming lands and real estate of \$500,000, for four months, with a view to carrying out the enterprises for which the Rockmart Co., previously reported, was organized, with capital stock of \$4,000,000.

Savannah—The South Georgia Land & Improvement Co. has been incorporated by Wm. B. Stilwell, Loring R. Millen, of Savannah, and Lemuel Johnson, of Ware county. They have the right to buy, sell or lease locomotives, saw mills, tram roads, and man-

ufacture lumber, operate car works, etc. The capital stock is \$200,000, with the privilege of increasing to \$1,000,000.

Savannah—Cotton Mills.—The Savannah Cotton Mills have been incorporated by Louis M. Warfield, Jno. Flannery, Frederick L. Moore and E. F. Coe. The capital stock is \$50,000, with the privilege of increasing to \$200,000.

Savannah—Crematory.—The city council have awarded the contract for the erection of the crematory previously reported to the U. S. Gas & Fuel Co., of Philadelphia, for \$5,000.

Savannah—Railroad.—The Central Railroad directors have authorized the purchase of rails for the seven miles of road graded from Eden westward on the proposed Savannah & Western road.

Stilesboro—Chair Factory.—B. Lewis and J. K. and F. A. Milan are building a chair factory.

#### KENTUCKY.

Bowling Green—Brick-yard.—Geo. A. Collett contemplates establishing large brick works.

Carlisle—Electric Lighting.—The city council has appointed a committee to report on the advisability of starting an electric light plant.

Covington—The Trumpet Milling Co. has been incorporated by B. Lempker, Aug. Pieper and J. Graziani. The capital stock is \$75,000. They have purchased the mill of B. Lempker for \$60,000.

Covington—Tile Factory.—The Cambridge Tile Manufacturing Co. has been incorporated by C. B. Braunstein, Frederick W. Braunstein, Henry Binz, Henry Busse and B. L. Busse to manufacture and sell tiles. The capital stock is \$20,000.

Covington—Brewery.—The Bavarian Brewing Co. has been incorporated by Wm. Riedlin, John Meyer and Anton Ruh to conduct a general brewing and malting business. The capital stock is \$125,000.

Cloverport—Railroad.—Work will commence shortly on the Cloverport & Fordsville Railroad previously reported, distance nine miles. W. V. McCracken is president of the company.

Danville—Water Works.—Efforts are being made to build water works. The mayor can give information.

Eddyville—Chair Factory, &c.—The Mason & Ford Co., lessees of the penitentiary, will shortly put in additional machinery for making chairs, brooms, &c.

Frankfort—Grain Elevator.—Miles & Sons will erect a grain elevator with a capacity of 200,000 bushels.

Georgetown—Water Works.—A company has made a proposition to the board of trustees of Georgetown, S. Davis, chairman, to establish water works, which will probably be accepted.

Glasgow—Railroad.—The Chesapeake & Nashville road will be built to Glasgow, and will, it is said, probably establish their shops in Glasgow.

Glasgow—Natural Gas.—The American Well Drilling Co. have struck natural gas, and the citizens have subscribed \$10,000 towards the cost of piping the gas to Glasgow.

Glasgow—Natural Gas.—The Haven & Chase Oil, Natural Gas & Mineral Co. have struck gas in five wells and are erecting machinery for drilling more wells.

Hardinsburg—Railroad.—Parties are locating the Louisville, Hardinsburg & Western Railroad. Work will begin shortly. Breckenridge county has voted \$60,000 in aid of the road.

Harrodsburg—Electric Light Plant.—The city will probably adopt electric lights for lighting the streets. The mayor can give information.

Henderson—Electric Light Plant.—The Marshall Milling Co. contemplates putting in an electric light plant to light their mills.

Henderson—Planing Mills.—The Henderson Planing Mills have been incorporated by G. M. Alves, J. Loeb, Dr. J. H. Fletcher, R. D. Vance and others to build planing mills. The capital stock is to be not less than \$10,000 nor more than \$100,000. Ground has been secured for the mill.

Henderson—Railroad Shops.—The railroad shops of the Louisville, St. Louis & Texas Railroad will, it is claimed, probably be located in Henderson.

Lebanon—Canning Factory.—Wm. Johnston and others contemplate starting a canning factory.\*

Louisville—Saw Mills.—The Louisville, Hardinsburg & Western Railroad has, it is reported, contracted for machinery for saw mills along its line, to saw 50,000,000 feet of lumber annually.

Marion—Flour Mill.—Thos. Purdy will convert the building formerly used as a distillery into a flouring mill.

Marion—Brick-yard.—Goodin & Goodin have contracted with the Pineville Improvement Co. to burn 1,000,000 brick. They may start a brick-yard at Pineville.

Middlesborough—Coal Mining.—The Cumberland Gap Coal & Coke Co. will open coal mines and build coke ovens.

Middlesborough—Planing Mill.—Messrs. Hooten & Son will move their planing mill to Middlesborough.

Middlesborough—Wood-working Factory.—The Cumberland Gap Wood-working Co. will build a wood-working factory.

Middlesborough—Iron Furnaces.—Two of the iron furnaces previously mentioned as to be built will be erected by the Henry Clay Coal & Iron Co. The capacity of each is to be 125 tons. The other two, capacity 100 tons each, will be built by the Cumberland Furnace Co.

Middlesborough—Coal Mining and Coke Ovens.—The Louisville Coal & Coke Co., previously reported, will open mines and build coke ovens.

Middlesborough—Coal Mining and Coke Ovens.—The Atlanta Coal & Coke Co., previously reported, will open mines and build coke ovens.

Morganfield—Electric Light or Gas Works.—G. H. Hughes, Jr., and others contemplate starting small electric light or gas works, and want information as to cost, &c.

Paris—Cigar Factory.—Mr. Straus, of Lexington, has started a cigar factory.

Paris—Electric Light Plant.—George Varden and John Webb are organizing an electric light company, and will put in plant before the fall.

Pineville—Brick-yard.—R. L. Goodin and Robt. Goodin, of Lebanon, are prospecting with the view to establishing a brick-yard.

Pineville—A company is being organized for mining coal and making coke on Stewart's branch.

Pineville—Bridge.—The West Pineville Land & Improvement Co. will build a steel bridge across the Cumberland river to connect that suburb with Pineville.

Richmond—Buggy Factory.—C. W. Rodebaugh and John Donnellson have formed a partnership and will enlarge the buggy factory of the latter.

Richmond—Electric Lighting.—A proposition has been made to the city to establish electric light plant.

Richmond—Drug Factory.—R. C. Stockton, G. W. Willis and J. D. Wilson will incorporate a drug and medicine manufactory.

Richmond—Laundry.—A steam laundry is being erected.

Russellville—Canning Factory.—A stock company is being formed to establish a canning factory.

Russellville—Water Works.—The Commonwealth Construction Co., of Philadelphia, have applied for a franchise to build the water works previously reported.

Somerset—Ice Factory.—Owens & Delling will build the ice factory previously reported.

#### LOUISIANA.

Baton Rouge—Railroad.—The Baton Rouge, Ponchatoula & Mobile Railway Co. has been organized with C. S. Burt, president; E. J. Marsh, vice-president, and Angelo R. Burt, secretary, to build a railroad from Baton Rouge to the Mississippi line. The capital stock is \$400,000.

Bogue Chitto—Planing Mill.—The Keystone Lumber Co. will rebuild their mill at once.

Glencoe—Sugar Refinery.—W. P. Kemper, previously reported as having purchased sugar mill to be removed to his plantation, will add large amount of new machinery.\*

Louisiana—Sugar Factory.—Lucius Forsyth, Jr., has purchased the Pike's Peak plantation in St. James parish, and will erect a sugar factory.

Louisiana.—Berger Bros. will put in a steam train and vacuum pan on their Crescent plantation in Terre Bonne parish.

Louisiana.—The estate of W. A. Shaffer in Terre Bonne parish will put in double effects and a five-roller mill.

Mementan—Saw Mill.—T. H. Gilbert is building saw mill near Mementan.

New Orleans.—Jos. Hemandey, P. L. Girault, Page M. Baker, Jno. A. Aniello and others have incorporated the Aniello Life-saving Boat Co. for the manufacture of life boats, with a capital stock of \$100,000.

Rigolette.—Capt. E. C. Ball is erecting a shingle mill. He has purchased machinery with a capacity of 50,000 shingles per day.

Shreveport—Broom Factory.—J. K. Wilson intends to start a broom factory.

#### MARYLAND.

Baltimore.—H. L. Bond, Jr., of Baltimore, and H. S. Sears, Robt. Bacon, Richard H. Weld and Robt. Winslow, of Boston, and Henry Winslow, of Philadelphia, have formed the Sudbrook Co. with a capital of \$60,000 to improve and lay off a tract of 200 acres for suburban residence near Pikesville, with macadamized roads, water and gas works.

Frederick—Canning Factory.—The Louis McMurray Packing Co. has been incorporated by Mrs. Jane McMurray, Frank Goode and J. P. McDermott, of Baltimore, and Chas. W. Ross and Henry Williams, of Frederick. The capital stock is \$50,000. The company will operate the plant formerly operated by Louis McMurray.

Perryville—The Eureka Fertilizer Co. have decided to increase their capital \$150,000 for building acid chambers, enlarging, grinding and manufacturing facilities, &c.\*

Pocomoke City—Brick-yard.—The Pocomoke Brick Co. has been organized to establish brick works. F. H. Dryden is secretary of the company.

Townshend—Creamery.—A creamery company is being organized.

Washington, D. C.—Cable Road.—The Washington & Georgetown Railroad contemplate changing to the cable system, having secured the necessary privilege, as previously reported. The cost would be about \$700,000.

#### MISSISSIPPI.

Batesville—Bagging Factory.—The Panola County Farmers' Alliance are considering the location of a bagging factory.

Corinth—Woolen Mill.—The Alcorn Woolen Manufacturing Co. has been incorporated by Jno. H. Jones, E. M., Wm. W. and Paul T. Jones for the manufacture and sale of woolen goods. Capital stock \$50,000.

Greenville—Water Works.—The city council has decided to let a new contract for the construction of the water works, as the contractor who received the contract failed to give bond. W. A. Pollock and others have received 30 days' option to build works, put in sewerage system.

Greenwood—Compress.—Jas. Barke and



others, of Greenville, are considering the establishment of a cotton compress.

**Jackson—Bagging Factory.**—A stock company is being formed to build a bagging factory.

**Kosciusko—Wagon Factory.**—A. J. Atkinson has purchased ground on which to build a wagon factory.

**Natchez—Railroad.**—Work has commenced on the New Orleans, Natchez & Fort Scott Railway, and the president states it is to be completed to the Arkansas line by January 1, 1890.

**Rosedale—Courthouse.**—The contract for the courthouse previously reported as to be built has been awarded to J. F. Barnes for \$30,000.

**Starkville—Saw Mill.**—B. Crisler, reported last week as starting wagon and agricultural implement factory, will erect saw mill, &c., this summer or fall.\*

**Vicksburg—Railroad.**—It is reported that the Illinois Central Railroad Co. have begun surveying for the extension of their road to the Mississippi at either Vicksburg or Greenville.

**Vicksburg—The Future City Oil Works** have been incorporated with a capital stock of \$100,000 by Charles H. Mulholland, J. H. Roach and Mrs. Helen J. Powers. The company has purchased the oil mill and refinery of the Future City Oil Works.

#### NORTH CAROLINA.

**Concord—Bagging Mill.**—The Kerr Bag Manufacturing Co. has been incorporated by J. M. Odell, W. R. Odell, David F. Camron and J. W. Camron to build bag factory. The capital stock is to be \$1,000,000.

**Denver—Cotton Factory.**—A cotton factory is contemplated. T. H. Proctor can give information.

**Fair Bluff.**—The Carolina Land Co., previously reported as organized to develop timber land, will dredge the Lumber river and remove all obstructions in the way of steamboat navigation, and when they have completed the dredging of Big swamp they will dredge Ashpole swamp. Large mills will also be erected as previously stated.

**Fayetteville—Knitting Factory.**—The Fayetteville Cotton Mills expect to start small hosiery factory.\*

**Goldsboro—Railroad.**—The Enterprise Lumber Co. contemplate building a railroad to their saw mill on the Neuse at Waynesboro.

**Marion—Flour Mill.**—R. A. Hutchinson, of Kentucky, contemplates establishing a steam roller flour mill of 100 barrels capacity.

**Oxford—Copper Mine.**—The Gillis Mining & Manufacturing Co. will be incorporated to work the Gillis mine.

**Raleigh—Factory.**—The Wetmore Shoe & Leather Co. has been organized by W. H. Wetmore, M. A. Angier, J. W. Wellous, Major R. S. Tucker, Col. J. W. Hinsdale and others for the manufacture of shoes, saddlery and other articles of leather. The capital stock is \$100,000, with \$25,000 paid in.

**Rocky Mount—Tobacco Factory.**—The Gold Leaf Tobacco Works, capital stock \$50,000, will be organized with M. W. Hart, manager, and Geo. P. Hart, secretary and treasurer, to establish tobacco factory.

**Thomasville—Mining.**—The Baltimore Gold & Silver Mining & Smelting Co. will hold a meeting on March 18 to consider the raising of money to develop the company's property.

**Wilmington—Electric Light Plant.**—The North Carolina Power Co. has been organized with H. A. Burr, president; Wm. L. Smith, secretary, and E. P. Bailey, general manager. They have bought out the Wilmington Electric Light Co., and will erect a building for their plant. They have ordered additional machinery from the Thomson-Houston Electric Co.

**Wilmington—Warehouses.**—The Wilmington & Weldon Railroad Co. has purchased 38 acres of land near Goose Nest on which to build warehouses, &c.

#### SOUTH CAROLINA.

**Aiken—Saw Mill.**—A. S. Segler and Geo. W. Turner are putting up a saw mill about five miles from Aiken. They have purchased a 40 horse-power engine.

**Brewer Mine—Gold Mining.**—The Brewer Mining Co. will greatly increase their plant.\*

**Charleston—Electric Railroad.**—The street car company are contemplating adopting electricity for their road. Jno. S. Riggs is president.

**Chester—Electric Light Plant.**—The Chester Electric Light & Power Co. has been incorporated by Giles J. Patterson, Jno. J. McLure, Wm. M. Nicholson and others with a capital stock of \$5,000. They will erect the electric light plant previously reported.

**Chester—Machine Shop and Foundry.**—The Moffatt Manufacturing Co., previously reported, will have capital stock of not less than \$30,000. Will erect new machine shop, brick, two stories, 45x200 feet, and foundry.\*

**Columbia—Quarrying.**—The Southern Construction & Quarry Co. (A. R. Stewart, general manager,) previously reported as to develop quarry, will open 3 quarries and build 3 mile railroad.\*

**Greenwood—Cotton Mill.**—A stock company is being organized to build a cotton mill on the co-operative plan.

**Greenville—Jail.**—The county commissioners want plans and specifications for a new county jail to cost \$15,000.

**Laurens—Laundry.**—A stock company is being organized to start a steam laundry.

**Marion—Cotton Mill.**—Efforts are being made to raise capital to build the 2,000-spindle cotton mill previously mentioned, and prices on good second-hand machinery are wanted. Address Clark A. Willcox.

**Orangeburg—Street Railroad.**—The Orangeburg Street Railroad Co., previously reported, will commence work on their road shortly. They have appointed a committee to ascertain the cost of construction.

**Rock Hill—Factory.**—The Davis Canning & Candy Co. has been incorporated by L. M. Davis, A. H. White, D. Hutchinson and others for the manufacture of candy, crackers and bread. The capital stock is \$5,000. They will build the canning and candy factory previously reported as to be started by L. M. Davis.

#### TENNESSEE.

**Anderson—Timber Lands.**—It is reported that Horatio M. Alger, of Michigan, has purchased several thousand acres of mineral and timber lands for \$85,000 and will probably erect large iron and wood-working establishments.

**Athens—Electric Light Plant.**—Efforts are being made to secure the establishment of an electric light or gas plant.

**Carthage—Planing Mill.**—The planing mill company previously reported have applied for a charter with a capital of \$10,000. Their mill will have a capacity of 5 000 feet per day.

**Celina—Lumbering.**—The Wolf River Boom Co. has been incorporated by J. M. Overton, S. T. Douglas, J. E. Allison and others. They will construct looms in the Wolf and Obed Rivers.

**Chattanooga—Marble Works.**—Mr. Young, of Georgia, is considering the erection of his patent mill plant for preparing marble for the markets.

**Chattanooga—Street Improvements.**—An election will be held in Chattanooga March 27 to decide the issuing of \$200,000 worth of bonds for building and improving sewers and \$500,000 for opening and improving streets.

**Chattanooga—Railroad.**—The Belt Railroad Co. have let contract for a branch road to extend from Oax Hills to East End.

**Chattanooga—Railroad.**—Negotiations are pending for the sale of the Chattanooga, Cleveland & Murphy Railroad to an English syndicate who are represented by J. B. Erhart and Wm. Dowd, of New York. If the sale is made the road will be built at once.

**Chattanooga.**—The sale of wharf property mentioned last week was made to the Tennessee Land & Improvement Co. and not to the Tennessee River Transportation Co.

**Chattanooga—Saw Mill.**—Michigan parties are prospecting on the Tennessee and Clinch rivers with the view to purchasing timber lands, and if they purchase will, it is said, erect a saw mill in Chattanooga with a capacity of 50,000 feet per day.

**Chattanooga—Street Railroad.**—The street railroad company will extend their line to the city limits and probably to Ridgedale.

**Chattanooga—Railroad.**—The proposed Chattanooga Southern Railroad will, it is reported, be built, the necessary money, it is said, having been secured.

**Chattanooga—Mining, &c.**—The Piney Creek Coal & Land Co. has been chartered by A. M. Johnson, R. L. Watkins, Hugh Whiteside, D. J. Ellis and J. A. Smith to develop 10,000 acres of mineral and timber lands. They will probably open mines and erect saw mills.

**Chattanooga—Foundry and Pipe Works.**—The Chattanooga Foundry & Pipe Works, previously reported as enlarging works, will build an addition to cost \$10,000.

**Chattanooga—Sash-weight Factory.**—The Chattanooga Sash weight Co. are preparing to remove their works to Citico Junction and enlarge.

**Chattanooga.**—The Chattanooga Machinery Co. are improving their works.

**Chattanooga.**—The Ross-Meehan Brake Shoe Co., previously reported, have completed their works and will put in machinery shortly.

**Clarksville—Brick and Tile Works.**—Parties from Texas contemplate organizing a stock company to manufacture tile, fire-brick and pottery.

**Elmwood—Tobacco Factory.**—Conditt Bros. will start a twist tobacco factory.

**Knoxville—Street Railway.**—J. C. J. Williams, M. E. Thompson, T. C. Beamon and others have chartered the East End Railway Co. to build a street railroad from Ragles' Ferry to the city, previously reported as being organized to build dummy line.

**Memphis.**—The repair shops of the L. & N. Railroad will probably be enlarged.

**Memphis—Woodenware Works.**—The St. Louis Woodenware Co., St. Louis, Mo., have leased eight acres of land in West Memphis on which to build woodenware works. The capital to be invested is \$175,000. Theodore Tamm and Charles Ewatts will have charge of the works, which will employ about 200 hands.

**Nashville—Machine Shop.**—The Nashville, Chattanooga & St. Louis Railroad are having land graded for the machine shops to cost \$225,000, previously reported as to be built. Plans and specifications have been drawn, and the contract for foundation has been let to Thos. Broderick.

**Nashville—Electric Light Station.**—The Brush Electric Light & Power Co. have commenced work on their new station previously reported.

**New River Station—Railroad.**—New York capitalists have chartered the Cumberland Mountain Coal Railroad, to start from the Cincinnati Southern and intersect the Walden's Ridge road near Jenks.

**Ridgedale—Carriage Factory.**—J. N. White will, it is reported, build a carriage and wagon factory.

**Rogersville—Marble Mills.**—W. D. Kenner and O. B. Bynum have gone North to purchase machinery for their new marble mills to be erected this spring.

**Shelbyville.**—J. C. Tunc will rebuild his mill reported last week as burned. The loss was \$10,000.

**Sparta—Coal Mines.**—J. M. Overton has leased the Bon Air coal mines for the term of ten years.

**Tullahoma—Mill.**—W. R. French, previously reported as expecting to rebuild woolen mill, will build some kind of mill on the old site, but has not decided yet as to character.

#### TEXAS.

**Baird—Water Works.**—The citizens are contemplating the building of water works.

**Beaumont—School.**—Frank T. Smith has received the contract for the erection of the schoolhouse previously reported for \$9,307.

**Beaumont—Lumber.**—The Reliance Lumber Co., which has been a private company, has been incorporated with a capital stock of \$500,000.

**Clear Creek—Brick-yard.**—A brick-yard and tile factory has been started. S. D. Moore is interested.

**Colorado City—Salt Works.**—The Lone Star Salt Co. will add 500 barrels to daily capacity of their works.\*

**Cuero—Street Railway.**—A street railway is talked of.

**Cuero—Water Works.**—A system of water works are contemplated. The mayor can give particulars.

**Cuero—Gin.**—H. Runge & Co. will, it is reported, build a new brick gin.

**El Paso—New Town.**—A Chicago syndicate (Chas. W. Greene, El Paso, probably president) is reported to have purchased 500,000 acres of land 10 miles from El Paso for colonization purposes. Expect to lay out town, bore artesian wells, &c.

**Fredericksburg.**—The Fredericksburg Manufacturing Co., capital stock \$5 000, has been incorporated.

**Galveston—Proposals.**—The committee on streets and alleys want proposals for street filling for this year. The proposals will call for 8,000 barrels of lime and 7,000 cubic yards of sand.

**Greenville—Flour Mill.**—The Alliance Flouring Mill Co. has been organized with Capt. H. H. Wade as general manager.

**Houston—Brick Factory.**—The Brazos River Channel & Dock Co. contemplate starting a large brick-yard at the mouth of the Brazos.

**Houston—Flour Mill.**—A flour mill is projected. The Citizen's Association can furnish particulars.

**Liberty Hill—Flour and Corn Mill.**—The Liberty Hill Roller Mill Co., previously reported as organized to build flour mill, will probably build corn mill also.

**New Birmingham—Railroad, Iron-making, &c.**—The New Birmingham Iron & Land Co. has been incorporated by Jno. B. Reagan and W. J. Jamison, of Rusk, Texas, and Wm. R. Utley and Robt. A. Van Wyck, of New York, with a capital stock of \$3,000,000 to build railroads, develop mineral lands, &c.

**New Birmingham—Planing Mill.**—The Cherokee Lumber Co., reported last week as probably to build a planing mill, have ordered machinery and will probably add sash and door factory.

**Paris—Wagon Factory.**—The starting of a wagon factory is talked of.

**Sulphur Springs—Cotton-seed Oil Mill.**—Geo. Leder will build the cotton-seed oil mill previously reported as contemplated.

**Temple—Water Works.**—W. Goodrich Jones, city treasurer, invites proposals till March 30 for water works, to include 6½ miles 10-inch pipe to river, pumping station, &c.

**Tyler—Car Works.**—The Tyler Car & Lumber Co., previously reported as incorporated to build car works, have commenced laying off ground for their buildings.



## Building Notes.

Vernon—Street Car Line.—R. F. Jones and others have organized a company to build one-mile street railroad.\*

Waco—Railroad.—The citizens of Waco have accepted the proposition of the Texas Grand Trunk Line to locate their general office, shops, etc., in Waco, reported in our last issue.

Waco—Electric Railway.—The Waco Street Railway Co., previously reported, have asked for permission to use electric power.

Weatherford—Creamery.—J. M. Richard desires to communicate with parties who will take stock in a creamery. He will take \$2,000 worth of stock.

Weatherford—Creamery.—Jno. L. Kane, of Galveston, and L. W. Christian will establish a creamery on the latter's ranch near Weatherford at a cost of about \$5,000.

## VIRGINIA.

Alexandria—Distillery.—W. S. Mahoney will enlarge the Feagan distillery.

Chase City—Canning Factory.—W. K. Holt contemplates starting small canning factory.\*

Christianburg—Bottling Mineral Water. A. Z. Konier, of Roanoke, and G. G. Junkin, of Christianburg, and others have organized the Virginia Arsenic Bromine Co., capital stock to be not less than \$20,000 nor more than \$100,000, for the purpose of bottling and shipping the Warm Spring mineral water.\*

Front Royal—Factories.—A wagon factory and a canning factory are contemplated.

Front Royal—Bridges.—The citizens of Front Royal are making an effort to build bridges over the north and south branches of the Shenandoah river.

Green Forest—Pulp Mill.—Clemmitt & Sadler, previously reported, intend to increase their pulp mill capacity from two to four tons daily, at once.

Harrisonburg—Ice Factory.—The Harrisonburg Ice Manufacturing Co. has been organized with Jacob Meserole, president; E. S. Conrad, secretary, and C. A. Sprinkle, treasurer, and will build the ice factory previously reported. The company will have the privilege of erecting electric light works.\*

Lexington—New Town.—A company is being organized by Wm. A. Anderson, J. D. H. Ross, Wm. H. Ruffner and others to develop mineral lands near Balcony Falls, build an industrial town, &c.

Lynchburg—Brass and Iron Works.—George Benton, president of the Boontown (N. J.) Brass & Iron Works, is in Lynchburg to secure inducements for the removal of his plant to Lynchburg.

Lynchburg—Silk Mill.—The proposition of H. E. Conant, of Stonington, Conn., to establish a silk mill, previously reported, has been accepted, and the building will, it is said, be erected as soon as a site is secured.

Milnes—Furnace.—D. W. Flickwir, of Roanoke, reported last week as having purchased the Shenandoah Iron Co.'s property, including furnace, will, it is said, organize \$250,000 company to operate furnace and probably build another one.

Mount Sidney—Canning Factory.—Efforts are being made by J. J. Flavin to work up a company to build a canning factory. If successful machinery will be wanted.

Norfolk—Sewerage.—The city will build additional sewers and spend \$70,000 in increasing the capacity and completing the sewer pumphouses.

Norfolk.—The North Carolina Pine Lumber Co. has been incorporated with W. W. Tunis, president; John L. Roper, vice-president, and H. W. Johnson, secretary and treasurer, for the manufacture and sale of lumber. The capital stock is to be not less than \$25,000 and not more than \$500,000.

Parkley—Brick-yard.—Thos. R. Layfield, of Salisbury, Md., has purchased a tract of land and will start a brick-yard.

Palaski—Foundry and Machine Shop.—A stock company with a capital of \$30,000 has been organized to establish the foundry and machine shop previously reported to be built by Enoch Phillips and others. Reported that McWane & Co., of Wytheville, Va., will be interested.

Radford—Factory.—Proposals will be received by H. W. Shelky, secretary Radford Knitting Co., for the erection of the two-story factory building previously reported as to be built.

Richmond.—The Burton Electric Co. has been organized for the manufacture of the Burton electric heater. Wm. E. Tanner is president, and C. E. Wingo, vice-president and treasurer.

Richmond—Electric Railway.—Work has commenced on changing the motive power of the City Railway Co.'s cars from horse to electric power.

Richmond—Acid and Fertilizer Works.—James G. Tinsley and S. W. Travers have contracted to establish acid and fertilizer works to cost \$60,000. Will build at once.

Roanoke—Furniture Factory.—Lambert Bros., of Waynesboro, Va., contemplate moving their furniture factory to Roanoke.

Roanoke—Land.—The Magic City Land Co. has been organized with S. S. Brooke, president; D. W. Espenlano, vice-president; E. White, secretary, and C. O'Leary, treasurer.

Roanoke—Bridge Works.—The American Bridge & Iron Co. are purchasing machinery for their works, lately mentioned as being built. They have already received contracts for 1,500,000 pounds of iron work.

Staunton.—The Committee on Fire Department have recommended the appropriation of \$1,900 for the purchase of an electric alarm system, and awarded the contract for hose reels to Hardy & Son.

Staunton—Ice Factory.—J. F. Tannehill will establish an ice factory.

Staunton—Brick-yard.—Col. Bumgardner contemplates starting a brick-yard at Buena Vista.

Tazewell C. H.—Brick Works.—Jos. V. Kelley expects to start brick-yard.\*

Virginia—Factory.—A party has been corresponding with Thos. Whithead of Richmond, commissioner of agriculture, with a view to establishing a manufactory for working silica.

Woodstock—Bridge.—The citizens of Woodstock have decided to build a bridge costing \$5,000 across the north branch of the Shenandoah river at Hotter's Mill.

## WEST VIRGINIA.

Braxton C. H.—Railroad.—The county will vote on April 8 on the proposition to subscribe \$60,000 to the stock of the Weston & Elk River Railroad Co.

Charleston—Railroad.—The West Virginia & Pennsylvania Railroad Co. has been chartered by Geo. W. L. Marsden, of Philadelphia, and W. M. O. Dawson, Neil J. Fortney and others, of Kingwood, W. Va., to build a railroad from Rowlesburg to the Pennsylvania State line. The capital stock is \$500,000.

Charleston.—H. F. Jones, Lewis Steenrod, W. H. Caldwell and others have chartered the Union Building Association. The authorized capital is \$750,000.

Clifton—Rolling Mill and Nail Works.—It is rumored that Eastern capitalists, headed by Gen. Powell, will build a rolling mill and nail works.

Huntington—Flour Mill.—Parties contemplate starting a flour mill with a capacity of 100 barrels daily. C. E. Gwinn can give information.

Martinsburg—Agricultural Implement Works.—The Crane Machine Co., of Baltimore, are the purchasers of Fitz's machine shops, previously reported. Will manufacture agricultural implements and chains.

Parkersburg—Flour Mill.—The Novelty Mill Co. will increase their capacity and

put in roller machinery. The improvements will cost \$10,000. Have ordered machinery.

Parkersburg.—The Parkersburg Improvement & Construction Co., capital stock \$100,000, has been incorporated by Geo. W. Thompson, W. N. Chancellor, W. M. Trevor and others, for the purpose of constructing the new railroad from Fairmont to Clarksburg, and afterwards to Braxton C. H.

Point Pleasant.—The city council has contracted for electric lights.

Wheeling.—The Elm Grove Coal Co. will be incorporated by W. H. Chambers, Annie Waddle, Alfred Caldwell, C. B. Chambers and J. C. Hervey.

Wheeling—Temple.—J. Younge has prepared plans for a Jewish temple.

Wheeling.—The Logan Drug Co. has been incorporated by Jos. A. Bell, Peebles Tatum, C. L. Hubbard and the Misses Logan. The capital stock is limited to \$100,000.

Wileyville—Courthouse.—Wetzel county will vote in May on a proposition to issue \$35,000 of bonds to build a new courthouse in Wileyville.

West Virginia.—It is rumored that a syndicate of Washington capitalists are looking for a location for a large steel plant in West Virginia.

## BURNED.

New Orleans, La.—The Pine Wood Distilling Co.'s factory; insured for \$6,500.

Kirkwood, Miss.—The mill of Bennett Coulthen was damaged by a boiler explosion.

Sheffield, Ala.—The Knowles Knitting Mill has been destroyed by fire. The building and machinery were insured for \$12,000.

Summerton, S. C.—Ginhouse and mill shed of Ingram & Ragin damaged by boiler explosion.

Washington, D. C.—The saw mill of Wm. H. Dyer, loss \$20,000, and the storage sheds of Cammack & Decker.

ROLLING MILL SOUTH—CHICAGO, ILL., March 9, 1889.—We expect to establish a rolling mill at some point, but have not decided as yet to establish the same at Florence, Ala. Our mill will be a rod mill.  
KILMER MFG. CO.,  
E. E. KILMER.

BRIDGES—FRONT ROYAL, VA., March 9, 1889.—There is talk of erecting the bridges during the summer over the North and South branches of the Shenandoah river. They will be about 350 and 500 feet long. Estimated cost \$20,000 or \$25,000.  
W. P. KING, Mayor.

NEW MACHINE SHOP—CHESTER, S. C., March 8, 1889.—Have arranged, though not yet organized, a stock company, and will be known as the Moffat Manufacturing Co. Will manufacture agricultural machinery and implements. The capital stock will be not less than \$30,000, and probably more. Will go to work May 1. Will build new brick shop, 45x200 feet, two stories, and foundry. Will buy the latest and best machinery both for iron and wood.  
W. E. MOFFAT.

BIG QUARRYING OPERATIONS—COLUMBIA, S. C., March 11, 1889.—We will at once open and operate the quarries used in construction of the State House here (blue-gray granite). We will build a railroad three miles long, taking in three quarries. One quarry will be used for dimension building, stone and monumental work; the other two for rip-rap jettie work and for street work, and will want suitable plant for each—derrick, irons and guys, hoists, &c., for one, and compressors, drills and electric plant for blasting on the other two.  
SOUTHERN CONST'N & QUARRY CO.,  
A. R. STEWART, Gen. Man.

Abilene, Texas.—The building committee, J. E. Cockerell, chairman, have selected a plan for the new school building to be erected at a cost of \$10,000.

Americus, Ga.—The Baptist church building committee, Col. S. H. Hawkins, chairman, have decided to build a new church to cost \$20,000.

Baltimore, Md.—The Young Men's Republican Club Building Co. have decided to issue \$40,000 worth of bonds for the erection of their new clubhouse.

Birmingham, Ala.—The North Alabama Conference will locate a Methodist female college in Birmingham.

Bland C. H., Va.—J. L. Corder, Mechanicsburg, Va., has received contract to rebuild the courthouse lately burned.

Carthage, Tenn.—Hotel.—Capt. D. N. McDonald is considering the erection of a new hotel.

Carthage, Tenn.—The Methodists will erect a \$10,000 church.

Chattanooga, Tenn.—Hotel.—The Chattanooga & Lookout Mountain Railroad will build a 240-room hotel on Lookout Mountain. It will cost about \$100,000.

Chattanooga, Tenn.—Plans and specifications for a new building for the First National Bank have been completed.

Chattanooga, Tenn.—D. J. Chandler has received the contract for the erection of a four-story block for \$40,000. The Catholic Church will erect a two-story business block.

Columbus, Ga.—E. J. Rankin will build a four-story store building for A. G. Rhodes & Co.

Columbus, Ga.—The congregation of Trinity Episcopal Church will build a new church to cost \$40,000.

Darien, Ga.—The Darien Bank has purchased ground on which to erect a new bank building.

Forest City, Ark.—A building and loan association has been formed with James Fussell as president.

Florence, S. C.—The courthouse commission have accepted plans and specifications of Bruce & Morgan, of Atlanta. They want bids for the erection of the courthouse and jail, to cost about \$25,000.

Florence, Ala.—The Florence Building Co., A. W. Stockell, president, has let contract for 30 houses to L. V. Risley, of Nashville, Tenn.

Fort Worth, Texas.—Plans have been drawn for a \$25,000 building to be built by J. W. Wray.

Greenville, Miss.—Bartlett & Thompson, of Little Rock, Ark., are preparing plans for a \$20,000 opera-house to be put up by a company.

Hammond, La.—The Congregationalists will begin the erection of a church at once.

Henderson, Ky.—Depot.—The Louisville, St. Louis & Texas Railroad have selected ground on which to build depot and freight buildings.

Henderson, N. C.—The Henderson Storage Warehouse Co. have purchased ground on which to build a brick storage warehouse, 60x200 feet, two stories, with metal roof.

Hephzibah, Ga.—John B. Fryer is building five dwelling-houses, and Prof. Jackson will erect a 25-room boarding-house.

Knoxville, Tenn.—H. B. Carhart & Co. will erect a large business house, and the Knoxville Provision Co. will, it is understood, build a block of houses on Jackson street.

Louisville, Ky.—The Adams Express Co. will erect a new building.

Lynchburg, Va.—Edgerton S. Rogers, Richmond, Va., has prepared plans for a \$41,000 church to be built by the P. E.



Church of St. Pauls, Lynchburg. Work will commence about April 1.

Mossy Creek, Tenn.—Hotel.—A stock company has been formed to build a \$10,000 hotel.

Nashville, Tenn.—Thos. Broderick has received the contract for the erection of the shops for the Nashville, Chattanooga & St. Louis Railroad, previously reported. The cost of the shops will be about \$250,000.

Newport, Ky.—The Presbyterian Church has appointed a committee to attend to the building of a new church.

Paris, Ky.—A stock company is being organized on the building association plan to build the opera-house previously reported.

Paris, Ky.—Profs. Jones and Kelly, of the Paris Commercial College, are organizing a stock company with a capital of \$25,000 to purchase or erect a building for their college.

Point Pleasant, W. Va.—Bonds for \$20,000 are to be issued to build a new school-house.

Richmond, Va.—Depot.—The Chesapeake & Ohio Railroad will, it is said, in addition to the improvements mentioned last week, build a new passenger depot.

Richmond, Va.—The contract for the construction of the Masonic temple has been awarded to W. O. Barton for \$109,500.

Russellville, Ky.—The Deposit Bank has purchased a building and will remodel it for their bank.

Savannah, Ga.—The Ocean Steamship Co.'s wharves will be enlarged, as previously reported, and work will be commenced shortly on wharves and warehouses.

Troy, Ala.—The city will erect a new city hall to cost \$10,000. Bids and specifications are wanted.

Vicksburg, Miss.—P. P. Williams & Co. have, it is reported, purchased ground on which to erect a large fire-proof warehouse.

Waldo, Fla.—Depot.—The Florida Railroad & Navigation Co. (office, Jacksonville) will build a depot.

Washington, D. C.—John W. Paine will build 22 three-story houses to cost \$100,000.

Washington, D. C.—Plans are being prepared for a new church for St. Peter's Catholic Church to cost about \$70,000.

Washington, D. C.—Hotel.—W. C. Hill is preparing plans for a hotel to be built on I and 16th streets to cost about \$60,000.

Washington, D. C.—John C. McLean will have plans prepared for an apartment-house on 11th and G streets.

Washington, D. C.—Edward Waltz will erect six houses on F street to cost \$15,000; Geo. F. Schafer, two houses on 5th street to cost \$7,000.

Washington, D. C.—W. Dannenbower is having plans prepared for a block of eight dwelling-houses to be erected on F and 1st streets; also plans for six dwelling-houses on Massachusetts avenue; also 13 houses on Massachusetts avenue and Front street, and other houses in East Washington. He will build a five-story family hotel on H and 13th streets.

Washington, D. C.—T. F. Schneider has prepared plans for a residence to cost \$12,000 for W. Taylor Birch; also plans for a dwelling-house for Levi Woodbury in Iowa Circle to cost about \$8,000. E. Carroll will erect a residence on New Jersey avenue. Hornblower & Marshall have prepared plans for a business block to be four stories high for J. T. Lenman.

BUILDING ELECTRIC ROAD.—CHATTANOOGA, TENN., March 7, 1889.—We are building an electric road to be in operation 15th April 5 miles long. Will extend as we see our way clear. Have some valuable franchises which we propose to use. May perhaps use small dummies on parts of our system. S. W. DIVINE, Treas.

## The Great Basic Steel Plants.

Mr. Jacob Reese's letter two weeks ago to the MANUFACTURERS' RECORD on the building of great basic steel plants and a ship-building yard in the South has attracted much attention, and in an interview published in the Memphis Avalanche, March 8, he added that—

"he and his associates were about to erect at Sheffield and Ensley City, near Birmingham, immense mills for the manufacture of steel plates by the basic process.

The Sheffield mill is to be the largest in the world. There it is proposed to make all kinds of steel plates for ship-building purposes, merchant vessels and men-of-war alike, as well as boiler plates enough to supply the whole South.

In connection with this enterprise it is intended to establish a big ship-yard at Pensacola or some other Southern port, where vessels of the Southern steel will be constructed.

The mill at Ensley City is to make architectural shapes of all kinds, deck beams and girders.

Neither mill is designed for the manufacture of steel rails, owing to the other work being more profitable. Steel rails are now sold at Pittsburgh for \$26 to \$27 a ton, while ship plates are worth \$50 and boiler plates \$85 a ton."

IN Spartanburg county, South Carolina, there are 8 cotton mills in operation, or under construction, with a total of 122,000 spindles, Clifton leading with 50,000 spindles, which is the largest number of any cotton mill in the South. There are many other counties in the South that could do equally as well as Spartanburg if they would display the same energy.

NEW ENTERPRISES AT BEAUMONT—BEAUMONT, TEXAS, March 6, 1889.—On the 5th inst. the contract for building a two-story brick schoolhouse at this place was let to home contractors for \$9,200. This building is to be used as a public schoolhouse. In the past week the Texas Tram & Lumber Co. have completed their planing mill, sash and door factory and dry-kilns, located at this place and valued at \$40,000. The Beaumont Lumber Co. have recently added about \$15,000 worth of additional machinery, &c., to their planing mill. The Reliance Lumber Co. will soon erect another large dry-kiln. Messrs. Rachford & Bor'ages are making good progress in organizing a company with a capital of \$200,000, to build wharves, &c., at Lubin's Pass, Texas.

JAS H. RACHFORD.

A POLE ROAD—GREENVILLE, ALA., March 7, 1889.—The Greenville S. E. pole road will be built immediately to Leon, Andalusia and Elba and other points, and will need two or more engines. The pole roads are a grand success in this portion of the State and are doing good work.

W. W. WILKINSON.

A BIG BAG FACTORY—CONCORD, N. C., March 7, 1889.—The Keon Bag Manufacturing Co. has been incorporated, with a capital stock of one million dollars, (\$1,000,000), for the manufacturing of all kinds of bags.

J. M. ODELL.

TO START A NEW TOWN—LEXINGTON, VA., March 11, 1889.—I am engaged in an effort to organize a large company to build a manufacturing city at Balcony Falls, Va. The prospect is very good for success.

J. D. H. ROSS.

## The South's Prosperity.

[Special correspondence MANUFACTURERS' RECORD.] CHATTANOOGA, TENN., March 11, 1889.

So far as observation goes, there is hardly a section of the South but what the status of business is onward and upward. In all the trade centers there is, at the present time, a greater activity in solid business matters than has ever before existed in the history of the South. In the past there have been a number of periods of spasmodic excitement that have been called booms, and which, perhaps, have resulted in a general gain, but the influences and operations that are now working are much more of a conservative nature, and while not lacking strength nor volume, are being conducted in such a manner that will result in far greater benefit and more solid prosperity and a greater outlook for the future. The rashness with which many operations were being inaugurated and carried on, and consequent failures or partial failures, are now wanting, and the experiences of the past are now being turned to useful account, and with the aid of much Northern capital, well planned undertakings can hardly be other than successful. The great staple of the South, pig iron, is still on top. Notwithstanding the low prices that exist at the present time, there is probably not a single furnace in the Alabama and Tennessee districts but what is making some money, and it is quite certain that there are many North of Mason & Dixon's line that are not doing this, and probably there are many that are not getting a new dollar for an old one. Under this condition of affairs it requires no prophetic vision to predict the future life of this class of furnaces. What the effect on the future of the iron business will be when the present capacity of the South shall have been more than doubled, which it certainly will be within the next ten years, can well be discounted, so far as production in the United States is concerned.

GREAT ACTIVITY AT MACON—MACON, GA., March 9, 1889.—The Palmer Manufacturing Co., of Charleston, S. C., have bought the laboratory building 3 miles from Macon, with 11 acres of land, and will erect a large cooperage or barrel factory. They will employ 250 men. This property was owned by the Confederate Government, and the building, 50x300, two stories, is one of the finest in the country.

J. F. & W. A. Crutchfield are building a cotton factory in the near vicinity; in fact, the building is about half finished. The main building is 60x240, two stories.

The Georgia, Southern & Florida have commenced work on their shops on 7 acres, near city limits.

Thos. W. Troy and R. H. Plant will erect a grain elevator and immense corn mills at once. Other industries in contemplation.

W. W. COLLINS.

MACHINERY WANTED—IRVINE, KY., March 7, 1889.—If we can get the machinery for an ice factory at bed rock prices we will undertake the enterprise. We will want the smallest sized machine that is manufactured, as the town has only 400 population. Would like to hear from some of the manufacturers on prices, &c.; also on electric plants, as we need electric lights; also on tools, implements and saws for quarrying and dressing building stone.

ESTILL SPRINGS CO.

WE HOPE NONE IS MADE—SALISBURY, N. C., March 7, 1889.—I want to know what machinery is necessary for converting swill sloop from a distillery into vinegar, and the process it undergoes. I believe it is manufactured either in Cincinnati, O., or in Louisville, Ky. S. SPAIN.

## MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Bagging Machinery.—Henry F. Moore, Grenada, Miss., wants information about bagging machinery.

Boiler.—J. M. Roberts, Lincolnton, N. C., will probably want 15 horse-power boiler for machine shop now building.

Boiler.—Lamb & Smith, Columbia, Tenn., want first-class boiler 16 feet x 43 inches.

Boiler and Engine.—J. R. Brown, High Point, N. C., wants 8 or 10 horse-power boiler, new or second-hand.

Boiler and Engine.—Clark A. Wilcox, Marion, S. C., wants prices on boiler and engine for prospective 3,000-spindle cotton mill.

Boiler and Engine.—C. C. Eaves, Buchanan, Ga., wants 40 horse-power boiler and 35 horse-power center crank engine.

Boilers and Salt-working Machinery.—The Lone Star Salt Co., Colorado City, Texas, want boilers and salt-working machinery for an increase of 500 barrels to their daily capacity.

Boilers and Engines and Fertilizer Machinery.—The Eureka Fertilizer Co., Perryville, Md., want 18x36-inch Corliss engine, two 75 horse-power tubular boilers, 3-run 48-inch buhrs, second-hand flue boiler for tank about 36 inches diameter and 12 to 16 feet long, &c., for enlargements of fertilizer works.

Boiler, Engine and Wood-working Machinery.—B. Crisler, Starkville, Miss., will want to buy boiler and engine, saw mill, band saw, scroll saw, cut-off and rip saw, mortiser, spoke lathe, planers, &c., this summer or fall.

Boilers and Sugar Machinery.—W. P. Kemper, Glencoe, La., wants four boilers 42 inches diameter and 28 or 30 feet long, with 15 3/4 or 16 inch flues, bagasse burner, two centrifugals, &c.

Bottling Works, &c.—The Virginia Arsenic Bromine & Lithia Springs Co., Christiansburg, Va., want corking apparatus, glass bottles by car-load, glazed pipe, &c.

Boring Machinery for Oil and Gas.—Wm. Phipps and others, Hartford, Ky., have leased 15,000 acres of land and want complete outfit for boring for oil and gas.

Brick Machinery.—Jos. V. Kelley, Tazewell C. H., Va., wants machinery for plant to make 15,000 to 20,000 bricks a day.

Broom Machinery.—W. A. Bates, Griffin, Ga., wants prices, &c., of broom machinery.

Canning Factory.—D. T. Bacot, Greenville, S. C., wants prices on full outfit for canning factory.

Canning Machinery.—W. K. Holt, Chase City, Va., wants prices on plant for small canning factory.

Canning Machinery.—R. Futral, Griffin, Ga., will want machinery for the canning factory reported last week as to be built at Jackson, Ga.

Canning Machinery.—Wm. Johnston & Bro., Lebanon, Ky., want prices on canning machinery.

Cars and Rails.—R. F. Jones, Vernon, Texas, wants prices on cars and rails for one-mile street road.

Cotton Mill Machinery.—Clark A. Wilcox, Marion, S. C., wants prices on good second-hand machinery for 2,000-spindle mill.

Electric Light and Engine.—The Fayette-



ville Milling Co., Fayetteville, Ark., will want incandescent plant of 15 to 25 lights and engine to run it.

Electric Plant.—The Searcy Electric Light Co., Searcy, Ark., will want 700 incandescent electric plant complete.

Electric or Gas Plant.—G. H. Hughes, Jr., Morganfield, Ky., wants prices on small electric or gas plant to light the town.

Electric Plant Complete.—J. B. Dillon and others, Jonesboro, Ark., want 75 or 100 horse-power steam plant and full electric equipments for 600 incandescent electric works.

Electric Lights.—The Estill Springs Co., Irvine, Ky., want prices on small electric plant.

Engine.—The Front Royal Wagon Factory, Front Royal, Va., want engine for new factory.

Engine, &c.—The Virginia Chemical & Manufacturing Co., Portsmouth, Va., will want small engine and mixers after awhile.

Fertilizer Machinery.—The Alexandria Fertilizer & Chemical Co., Alexandria, Va., will want burrs, screens, elevator buckets, rolls, mixers, disintegrators, &c.

Flour Mill.—G. D. Willis, Horse Creek, Ky., will want machinery for small flour mill in the fall.

Furniture Machinery.—A. P. Weathers, Shelby, N. C., wants machinery for small furniture factory.

Gold Mining Machinery, Electric Lights, &c.—The Brewer Mining Co., Brewer Mine, S. C., want 80-stamp (gold) mill, 32 concentrators, crushers, amalgamating plates, and other amalgamating machinery, either electric motor or locomotive for tunnel, ore cars, rock drills, &c., &c. "We contemplate the erection of the mill this summer. Will probably use electric lights. Will use both water and steam power machinery."

Ice Machinery.—The Estill Springs Co., Irvine, Ky., want ice machinery, smallest size made.

Ice Machinery.—The Harrisonburg Ice Manufacturing Co., Harrisonburg, Va., want ice machinery.

Ice Machinery.—Owens & Dolling, Somerset, Ky., want complete plant for ice factory.

Knitting Machinery.—The Fayetteville Cotton Mills, Fayetteville, N. C., want knitting machinery for hosiery factory.

Lathe.—The Knoxville Brass & Iron Foundry, Knoxville, Tenn., want a lathe.

Locomotives and Cars.—J. A. Gabury, general manager Jacksonville, Williamsport & Annapolis City Railroad, Jacksonville, Ala., will want 4 engines, 6 passenger cars and steel rails for 20 mile road.

Machine and Foundry Tools.—The Moffatt Manufacturing Co., Chester, S. C., will want latest tools for machine shop to be 45x 200, two stories, and foundry.

Machine and Foundry Tools.—H. Lizello, Lexington, N. C., wants machine tools, new or second-hand, for machine shop and foundry.

Machine Shop and Foundry Tools.—J. M. Roberts (Lincolnton Foundry), Lincolnton, N. C., wants lathe 15 inches swing, 10 feet long, 6 or 8-foot planer, for iron machine for cutting key grooves, and other tools for foundry and machine shop.

Natural Gas Boring.—A. L. Krewson, Jonesboro, Ark., wants gas-boring machinery.

Photo-engraving.—E. G. Stevens, Birmingham, Ala., wants full outfit for photo-engraving.

Quarrying Machinery.—The Southern Construction & Quarry Co., (A. R. Stewart, general manager), Columbia, S. C., want complete plant, compressors, drills, electric plant for blasting, &c., in two quarries, and derrick, irons, guys, &c., for another.

Quarrying Machinery.—The Estill Springs Co., Irvine, Ky., want machinery, saws, &c., for quarrying and dressing building stone.

Steam Heating.—Mason Maury, architect, Louisville, Ky., wants steam heating for \$50,000 library building, heavy rolled glass for floors, &c.

Wagon Machinery.—The Front Royal Wagon Factory, Front Royal, Va., (capital stock \$15,000) want full supply of machinery for new factory.

Watchman's Clock.—Brinson & Brinson, Stillmore, Ga., want improved watchman's clock.

BIG COTTON MILL.—SPARTANBURG, S. C., March 9, 1889.—The Spartanburg Manufacturing Co. are just now commencing to build a 10,000 spindle cotton mill. Three-fourths of the stock already subscribed, nearly all of it by the people of the town and county. Steam will be the motive power. The writer is president and W. E. Burnett, treasurer.

JOHN H. MONTGOMERY.

LIBERTY HILL, TEXAS, March 9, 1889. We expect to put up a flouring mill of from 25 to 50 barrels per 24 hours; probably corn mill also.

LIBERTY HILL ROLLER MILL CO.

MACHINE SHOP AND FOUNDRY.—LINCOLNTON, N. C., March 7, 1889.—The Lincolnton Foundry will be torn down and new buildings will be erected and the latest improved machinery added. First, a lathe (latest improved) is wanted with about a 15-inch swing and ten feet in length, a 6 or 8-foot planer for iron surfaces, a machine for cutting key grooves, &c.; a 15 horse power boiler may be needed also, a number iron-working tools and other machines of less importance, but necessary for a first-class foundry. Work on buildings begins next week, and bids for the above machinery are desired at once.

J. M. ROBERTS.

WOOLEN AND GRIST MILL.—COLUMBUS, Miss., March 8, 1889.—I will buy a new grist mill and other machinery as I can get the work done. The Columbus Woolen Mill has been idle a year, parts of it two years, and I find that it will need rebuilding to some extent (floors and sleepers rotted out), and machinery all out of order; shafting all disarranged from cause above named. I cannot hope to get it in operation before summer.

G. W. COX.

FERTILIZER FACTORY.—ALEXANDRIA, VA., March 7, 1889.—The Alexandria Fertilizer & Chemical Co. have been incorporated and will have to purchase machinery at any early date for manipulating, etc. The company has mill, engine and boilers, but need burrs, screens, elevator, buckets, rolls, mixers and disintegrators.

JOHN P. ROBINSON, Pres.

### FOR SALE.

#### One Magnetic Iron Mine.

One rich mine, containing Gold, Silver, Copper and Iron, all handy to transportation. For further particulars, address

A. M. IZLAR,

Real Estate Agent, MARION, Western North Carolina.

### WANTED

by an Experienced Manager and Superintendent (42) a situation as Superintendent of Factory or Manager of Office, or the Management here in Chicago and the Northwest for four Eastern Factories. I pay all expenses—traveling, postage, stationery, &c., &c. Best of references given. Address C. M. B., 370 Monroe Street, Chicago, Ill.

#### Iron & Wood Workers & Foundrymen.

We offer for sale, the complete outfit of Machinery now being used by **Thos. Melick & Co.** for the manufacture of Plows, Cultivating Implements, etc. This comprises **Iron Working Tools, Trip Presses, Shears, Iron Planers, &c. Wood Working Machinery, Bovers, Frizzer, Planers, &c.** A complete foundry outfit. This machinery is now in use and in first-class running order. Will be sold at reasonable figures and time, or we will rent the property now occupied by the **Factory of Thos. Melick & Co.** together with power and all the machinery for a stated period. This is a rare chance for practical men with limited capital. Enquire of **B. F. AVERY & SONS, LOUISVILLE, KY.**

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Boiler Plate and Tank Iron, Lap-Welded Pipe and Boiler Tubes, Boiler and Sheet Iron Rivets, Steam Brass Goods and Engine Trimmings, Iron Valves and Fittings, Pipe Workers' and Machinists' Tools, Wood and Iron Pulleys, Belting, Hose and Packing, SEWER PIPE, FIRE BRICK and CLAY.

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C. R. MAKEPEACE & CO.  
ARCHITECTS and MILL ENGINEERS  
PROVIDENCE, R. I. Plans, Specifications and Estimates furnished for Cotton and Woolen Mills.

LOCKWOOD, GREENE & CO.

MILL  
ENGINEERS,  
NEWBURYPORT, MASS.

PLANS AND SPECIFICATIONS FURNISHED FOR THE CONSTRUCTION, EQUIPMENT AND ORGANIZATION OF COTTON AND WOOLEN MILLS.

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5 West 4th St., CINCINNATI, O.  
Consulting Engineers.  
DESIGNERS OF MACHINERY.  
Drawings Made to Standard.  
Blue-Printing a Specialty.  
Write for Particulars.  
IT WILL PAY YOU!



STEAM DREDGERS,  
PILE DRIVERS,  
VULCAN IRON WORKS, Chicago.

Send for our new catalogue.

### PROPOSALS.

SECRETARY DEPARTMENT, Office of the Secretary, March 7, 1889. Sealed proposals will be received at this Department until 2 o'clock P. M., Saturday, April 6, 1889, for supplying certain articles of standard furniture required for the Treasury building, Washington, D. C. Specifications and drawings, with blank form of proposal, will be furnished upon application to the Department. The right to reject any and all bids, and to waive defects is reserved. Proposals should be addressed to the Secretary of the Treasury, and endorsed "proposals for supplying standard furniture, Treasury Department, Washington, D. C." HUGH S. THOMPSON, Acting Secretary.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 4 o'clock P. M. on the 26th day of March, 1889, for the labor and materials required in the erection and completion of the Iron Roof, Ironwork of Ceiling, Stairway in Tower, &c., for the U. S. Court House and Postoffice Building, at Pittsburgh, Pa., in accordance with the specification and drawings, copies of which may be seen at this office, the office of the Superintendent, the Builders' Exchange at Baltimore, Md., Cincinnati, O., and Detroit, Mich.; Builders' & Traders' Exchanges at Chicago, Ill., and Louisville, Ky.; Mechanics' & Traders' Exchange, New York City; Engineers' Society of Western Pennsylvania, Pittsburgh, Pa., and the Master Builders' Exchange at Philadelphia, Pa. Each bid must be accompanied by a certified check for \$500. The Supervising Architect will furnish a limited number of copies of the specification and drawings at \$3 a set, upon receipt of that sum in postoffice money-order, drawn to the order of the Treasurer of the United States, WILL A. FRERET, Supervising Architect, March 8th, 1889.

SEALED PROPOSALS will be received at the office of the Supervising Architect, Treasury Department, Washington, D. C., until 4 o'clock P. M. on the 26th day of March, 1889, for the labor and materials required in the erection and completion of the Low-Pressure Return-Circulation Steam-Heating and Ventilating Apparatus for the U. S. Court House, Postoffice, &c. Building at Jefferson, Texas, in accordance with the specification and drawings, copies of which, with other necessary information, may be seen on application at this office, the office of the Superintendent, the Builders' Exchange at Baltimore, Md., and Cincinnati, O.; the Builders' & Traders' Exchanges, Chicago, Ill., and Kansas City, Mo.; the Mechanics' & Traders' Exchange, New York City, and the Mechanics' Exchange, St. Louis, Mo. Each bid must be accompanied by a certified check for \$500. The Supervising Architect will furnish a limited number of copies of the specification and drawings at \$3 a set, upon receipt of that sum in postoffice money-order, drawn to the order of the Treasurer of the United States, WILL A. FRERET, Supervising Architect, March 7, 1889.

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RICHMOND, VA.

OUR MANUAL OF INVESTMENTS, the largest pub-  
lication of the kind published by any banking house  
in the United States, may be had upon application  
by parties interested.

### Richmond Stock Exchange Quotations.

Reported by JOHN L. WILLIAMS & SON, Bankers,  
Richmond.

RICHMOND, VA., March 12, 1889

|  | BID.    | ASKED.  |
|--|---------|---------|
| Virginia New 3's, 1932                       | 65 1/2  | 65 3/4  |
| Danville 6's, 1914                           | 110     | 110     |
| Lynchburg 6's, 1901                          | 110     | 112     |
| Lynchburg 5's, 1901-1917                     | 109 1/2 | 110     |
| Norfolk Water 8's, 1901                      | 109     | 110     |
| Norfolk 5's, 1911-1917                       | 109     | 110     |
| Petersburg 5's, 1918                         | 109 1/2 | 110     |
| Richmond 5's, 1923                           | 109 1/2 | 110     |
| Richmond 5's, 1922                           | 112     | 114     |
| Char., Col. & Aug. R. R. Gen. 6's, 1933-1905 | 106 1/2 | 107 1/2 |
| Georgia Pacific 1st 6's, 1902                | 109 1/2 | 110     |
| Norfolk & Western Gen. 6's                   | 109 1/2 | 110     |
| Petersburg Railroad Class A 5's              | 109     | 110     |
| Petersburg Railroad Class B 6's              | 107 1/2 | 108 1/2 |
| Rich & Mecklenburg R. R. 1st 6's             | 105     | 106     |
| Va. Midland Gen. Mgtg. 5's                   | 88 1/2  | 89      |
| West. N. Car. Corral 6's, 1914               | 87      | 88      |
| Northwestern N. Car. 1st Mgtg. 6's           | 88      | 90      |
| Atlanta & Charlotte R. R. Stock              | 87 1/2  | 88      |
| Char., Col. & Aug. R. R. Stock               | 47      | 49      |
| Petersburg R. R. Stock                       | 59 1/2  | 61 1/2  |
| North Carolina Railroad Stock                | 100     | 100     |
| R. F. & Pot. R. R. Div'd Obligations         | 113 1/2 | 114     |
| Sloss Iron & Steel Co. Stock                 | 32      | 33      |

### BANKERS AND BROKERS.

## WILSON, COLSTON & CO. (Members of Baltimore Stock Exchange.) Bankers & Brokers.

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Investment and Miscellaneous Securities a specialty, and large lines handled. Exceptional facilities for  
dealings in all classes of Southern Bonds. Loans on Collateral Securities negotiated. Quotations and  
information furnished on application, and correspondence invited.



### The Usual Result.

FLETCHER & THOMAS,  
Manufacturers of Brick Machinery and All Kinds of  
Brick Makers' Supplies.  
INDIANAPOLIS, IND., Feb. 25, 1889.  
*Manufacturers' Record Co.:*

Gentlemen—We have been advertisers in your splendid medium for three years or more, and consider it one of the very best investments in advertising we have ever made. Scarcely a day passes that we do not hear from it in some way, and our trade throughout the South, which more than doubled last year, was largely due to the MANUFACTURERS' RECORD's influence and large circulation, we have no doubt.

Advertisers in our line of trade, who are not thoroughly acquainted with the merits of your journal as an advertising medium, would think your rates were high, but after a thorough test, we can say the MANUFACTURERS' RECORD and the Clay Worker have never failed to pay us for any amount of money invested; and we heartily recommend your medium to the clay-working machinery manufacturers as the best for Southern trade, and we frequently get inquiries through it from other parts of the country.

Yours very truly,

FLETCHER & THOMAS.

OFFICE OF C. W. RAYMOND & CO.,  
Manufacturers of Brick Makers' Supplies.  
DAYTON, O., March 2, 1889.

*Manufacturers' Record Co.:*

Gentlemen—We expect in a few days to increase our ad., feeling that results have been such as to justify us in so doing. Enlarging somewhat on the above, we would state that we are well pleased with our last year's advertisement, having received very substantial and, we think, permanent good from it. The MANUFACTURERS' RECORD is certainly the best paper in the Southern territory. Very truly yours,

C. W. RAYMOND & CO.

TO BUILD RAILROAD—PALESTINE, TEXAS, March 4, 1889.—The firm who have the contract to build 85 miles of the Dallas S. E. & Pacific Railway are myself, D. Murphy, H. Burns and W. S. Peters, composing the firm of Burkitt, Burns & Co.  
G. W. BURKITT.

NEW TOBACCO FACTORY—ROCKY MOUNT, N. C., March 9, 1889.—The Gold Leaf Tobacco Works will soon be incorporated with capital stock of \$50,000. The concern will begin May 1, 1889. M. W. Hart, manager; Geo. P. Hart, secretary and treasurer.  
X.

TO BUILD HOTEL—WASHINGTON, D. C., March 12, 1889.—I shall commence building a family hotel, 53x144 feet, containing over 125 rooms; all modern improvements—steam heat, elevator, electric bells, &c.—to be completed by September 1. Pressed brick and brownstone front, five stories high, tiled halls on first floor, wood work hard, oil finish, cabinet mantels, &c.  
W. M. DANENHOWER.

NEW ENTERPRISE—FRONT ROYAL, VA. March 8, 1889.—The Front Royal Cigar Co., chartered, capital subscribed \$6,160, will commence business March 15, 1889. Front Royal Canning Co., capital \$3,000, own the necessary plant and machinery. Front Royal Wagon Factory; subscription started to-day; capital to be \$15,000; \$8,000 subscribed; practical wheelwright at the head of it; will want engine and all necessary machinery. W. P. KING.

MANAGERS of mills, factories, furnaces, mines, etc., and parties starting manufacturing enterprises, and needing machinery or supplies of any kind, will find it profitable to consult the advertising columns of the MANUFACTURERS' RECORD. Its pages contain names of the best houses in the country among manufacturers of and dealers in machinery and mill supplies.

ACTIVITY AT SAN ANTONIO—SAN ANTONIO, TEXAS, March 5, 1889.—Some enterprises of moment seem about to get a footing in our old town, which promise to give us a slight boom. A large and commodious building is in course of construction, and indeed near completion, on the corner of Alamo and Nueva streets, for a cracker factory which some gentlemen of enterprise from the North are about starting. Others are now prospecting with the view to starting a paper mill, an enterprise that would pay well, doubtless. Arrangements have been made to extend the San Antonio & Aransas Passenger Railway to Llano, the great iron region, via Fredericksburg, Gillespie county, the seat of the finest marble in the United States, and work has already commenced on the line. J. S. Lockwood & Co., who have an ice plant here, were boring an artesian well for water near their plant, when at the depth of 233 feet the water rose to the surface, and being strongly impregnated with smell of gas, a match was applied when the jet took fire and burned for several days until arrangements were made to stop the flow until facilities for cutting off the gas and diverting it to some useful purpose could be had. Several persons, in boring for artesian wells, have struck what is supposed to be oil, and Mr. Baine, on his ranch about 7 miles from town, has recently struck an oil that will refine into pure petroleum. Artesian wells at the depth of 3 or 400 feet are being found all over this section, so that our water supply for the future is secure, even if the oil and gas wells do not turn out to be of great value.

ELIAS EDMONDS.

TO BUILD OPERA-HOUSE—MT. STERLING, KY., March 9, 1889.—We expect to build opera-house in spring. May want some heating apparatus.

HARRAH & WINN.

MINING PROPERTIES FOR SALE—A. M. Izlar, Marion, N. C., advertises for sale in this issue of the MANUFACTURERS' RECORD two valuable mining properties in that State. One is a magnetic iron mine containing ore of superior quality. The other mine contains gold, silver, copper and iron. Both properties are within ready reach of transportation facilities.

THE Cambridge Roofing Co., of Cambridge, O., manufacturers of Crowl's patent standing seam steel roofing, plain rolled steel, corrugated iron and crimped edge roofing, iron and steel siding, beaded ceiling and siding, iron clap-boards and felts, issue an illustrated circular descriptive of their goods, giving rules of measurement, directions for laying and other information for all who employ such materials in building, together with awards and testimonials. Agents secure exclusive territory.

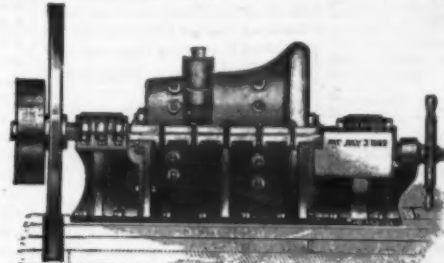
ST. LOUIS.—Messrs. Rogers, Meacham & Shields write: "The market continues quiet, with no especial features of interest to report. Transactions are mostly confined to small lots for early delivery. There is a large amount of iron being used, and the prospects are encouraging for a good year's business at fair price."

CHICAGO.—Messrs. Rogers, Brown & Co. write: "There are no changes in the temper of the market worthy of note. One or two large transactions have been consummated, and the rest of the business has been confined to small lots for immediate delivery. Southern irons are not pressing, but home brands are offered at lower figures than before. In the close competition for work among foundrymen there is a pressure to get lower-priced mixtures, and very good work is being done with low grade mixtures that heretofore have been deemed unsafe."

### "The Greatest Pulverizer in the World."

This is the striking name of a pulverizer manufactured by F. H. Moore, Cleveland, Ohio, which will pulverize gold and silver ores, iron ores, phosphate rock, cement material, coke, soft and hard coal, plumbago, flint, feldspar, red ochre, copper matte, sandstone, lime rock and calcined lime, &c. It will pulverize all of these materials to the required fineness, by the easy mode of adjustment, from 10 to 160 mesh, or finer if desired.

It has two bell-shaped cones of eight plates each—a bell within a bell. The stationary cone is bolted to the shell. The



"THE GREATEST PULVERIZER IN THE WORLD."

revolving cone is bolted to the hubs on the shaft. The cones are an inch apart at the small end, so that material larger than chestnuts can be admitted, while at the large end they are brought close together, so close by adjustment as to almost touch, when the finest pulverization is required. The cones are corrugated at the small end, and smooth at the large end. The cones are two inches thick, of the best chilled iron, and are made in a bell shape, so that they can be kept close together, by adjustment, at the large end till worn out. The only wear is on these cones, which are easily renewed.

It has a capacity of one to three tons an hour, according to kind of material and

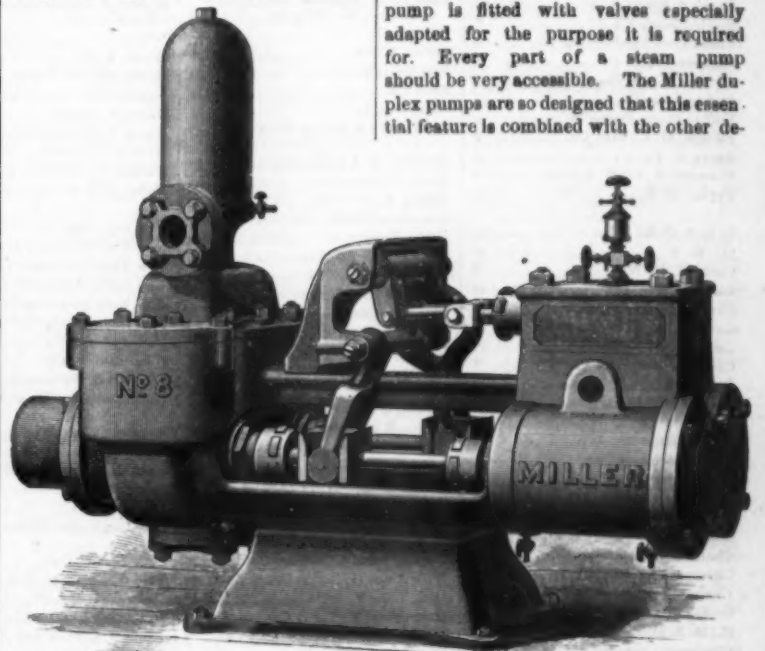
For further information and samples of various materials pulverized by this machine address F. H. Moore, Cleveland, O.

### The Miller Duplex Pump.

We illustrate herewith one size of a line of duplex pumps for boiler feeding, brewery, fire, mining and other purposes, manufactured by the Canton Steam Pump Co., of Canton, Ohio, known as the Miller duplex. A few of the features these pumps possess, as claimed by the manufacturers, are as follows:

"The arrangement of the levers, as will be seen by the engraving, is very different from the old style commonly used on

pumps of this variety, and admits of the wear being taken up centrally without changing the position of the levers, thereby keeping the stroke the same. By the use of these improved levers the pump is made more compact and floor space economized. The cylinders in the water end of pump on all sizes are of brass or extremely hard composition metal, suited for the purpose the pump is required for, and can be easily and quickly removed. For handling gritty or dirty water these cylinders are particularly desirable, as they can be entirely replaced at a very trifling cost comparatively. The water valves are very accessible, and each set can be removed independent of the others. Each pump is fitted with valves especially adapted for the purpose it is required for. Every part of a steam pump should be very accessible. The Miller duplex pumps are so designed that this essential feature is combined with the other de-



THE MILLER DUPLEX PUMP.

fineness required. The revolving cone is three feet in diameter at the large end, eighteen inches at the small end and three feet long, and can be run from 300 to 500 revolutions a minute. It has about ten square feet of pulverizing surface. There is no lost space nor lost time; every inch of this revolving cone is doing its work—first crumbling the material between the corrugated cones and on itself, and then rushing it by centrifugal force into larger but closer quarters, till it reaches the outlet in the condition of fineness required. Fifteen horse-power will run it. The weight is about 8,000 pounds.

sirable points these pumps possess. The stuffing boxes and glands are of brass and there is ample space for packing in these. All the moving parts are interchangeable, and with the exception of the levers there are no rights and lefts.

All the drippings, etc., are conveyed away by means of a pipe running from trough of pump. Sectional views show other features of equal importance. The company make a special effort to employ the best of skill and quality of material in the manufacture of their pumps, and to build a strictly first class pump in every respect. They will take pleasure in answering correspondence or giving any information desired.



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## Eastern Lumber Markets.

[Special correspondence MANUFACTURERS' RECORD.]

NEW YORK, March 12, 1889.

There is something like a temporary famine in poplar, because every one who has a supply on hand is looking for a higher price and is refusing to sell excepting at the highest market limit. Those who want poplar, and who are able to delay a week or two, are hoping for large arrivals that have been announced. Some shipments that were to have been received a week or so ago are some way along the road, and the railroad people are being urged to hurry them up. Everything points in the way of higher prices for poplar, and there is now really nothing in the way of preventing it. It may not last long, but the market is easily worked up and it is likely that an enormous amount of poplar will be worked off in this and other Northern markets before anything like a weakening tendency will develop itself. There is some poplar here in excess of actual demand, but so many are inquiring for it that there is an appearance of scarcity. A few dealers are refusing to sell, thinking that by April they will be able to make enough to justify them in holding on to it. We are interested in the movements of the lumber manufacturers in the South. The action taken at Birmingham, Ala., meets with approval here. Combination there means better prices here, and besides it enables us to look sixty or ninety days ahead, and we have not been able to do so for years past. We want to be able to calculate upon probabilities. It is a comparatively easy matter for us to ascertain, approximately, at least, what will be the consumption of yellow pine, cypress or any other wood for a month, three months or six months, but we are all at sea when we do not know how much is likely to come forward for a month or quarter. There is no desire to speculate in Southern lumber. In fact, those that have done so have learned lessons that they would prefer not to repeat. What they want is a reliable market and fixed prices, if that be possible. There is no reason why steady prices cannot be maintained for lumber right through the season. The cost of logging, shipping and handling is a pretty steady thing year in and year out, and there ought to be very little fluctuation in consequence. If the supply could be regulated the demand would be made known, so that Southern dealers can tell exactly what they are doing. As it has been, they have not been able to know what would come of a car-load or a cargo, whether it would sell high or low. With a combination all of these uncertainties will be gradually removed. The trade is being reduced down to a fine basis and the business of handling lumber is being reduced to a science. Very large quantities of dimension stuff will be wanted this year. There are armories to be built, large warehouses, immense structures of one kind or another. There are a number of large enterprises on hand and others are contemplated, and those who are not manufacturing unusually large sizes of Southern lumber will have an opportunity of picking up a few big contracts before ninety days are over. Those who are interested in dimension stuff might as well instruct their agents here to be on the lookout.

Over in Philadelphia a large amount of work is also coming along, although it is not yet within reaching distance. The Reading Co. has purchased several acres of ground in the Northern section of the city, and although nothing has been said as to what use it will be put to, it is understood that some very large storage buildings will be erected. Announcements have already been made in some journals of the intention of the railroad companies there

to build wharves and warehouses along the Delaware. The Globe Refining Co., of Pittsburg, of which Wm. L. Elkins, of Philadelphia, is president, will expend a million dollars, so it is given out, in the building of refineries on the Delaware and the establishment of a ship line to Liverpool. As soon as permission shall be obtained from the port wardens of Philadelphia a wharf will be built 638 feet long and 80 feet wide. Three other piers of the same dimensions will be built as soon as possible. They will all be roofed with a double-decked shed 550 feet long and 60 feet wide. The wharves will be long enough to accommodate the largest vessels. This will call for some lumber. In and around New York City a great many enterprises are looming up, and they will call for an enormous supply of lumber. Just how soon these schemes will materialize we cannot say decisively, but they are on their way, and there would be no harm in looking after some of the contracts. There is not much that is decidedly new in the way of prices or business. The supply of Southern hardwoods is not at all in excess of what they ought to be at this time and for this place. There will be room for additional supplies, and some of our dealers have been in close correspondence with representative lumber men in the South. They will endeavor to make a little more money for themselves. If the spirit of competition can be restricted within proper bounds there will be something in Southern lumber worth fighting for. There is quite an inquiry this week for oak, both plain and quartered. Those who are ordering now are willing to buy, only if they can secure the kind of lumber they want at a low price. There will be no very heavy buying this spring under any other circumstances. There is a sharp competition going on for large contracts, and while the volume of business will be large, the profits will be low. There is a good demand for car sills and flooring; also for beaded ceiling. There are dealers in the market for spruce, hemlock and white pine, but there are no very large contracts to report as yet. A large white pine combination has been organized at Tonawanda. The hemlock manufacturers entered upon the new year with better prospects than they did a year ago, but a good deal of saw mill machinery has been erected within the past four or five months, and unless appearances are very deceptive, there will be some sharp competition for business.

**TO BUILD RAILROAD—JACKSONVILLE, ALA.,** March 7, 1889.—The Jacksonville, Williamsport & Anniston Ry. Co. will build a first-class standard gauge railroad, a distance of 20 miles; will need 4 engines, 6 passenger cars, and standard steel rails for same. The road is to be completed before September 1, 1889. Jas. Crook is president. J. A. GABOURY, Gen. Man.

**COTTON SEED OIL MILL—SULPHUR SPRINGS, TEXAS,** Feb 20, 1889.—I am now getting things in shape to erect the oil mill which was to have been built last fall. GEO. LEDER.

**ENLARGING BREWERY—COLUMBUS, GA.,** March 6, 1889.—The Chattahoochee Brewing Co., of Brownville, Lee county, Ala., postoffice, Columbus, Ga., has recently added an additional cold storage room or cellar, 74x24. They are also adding a large refrigerating and ice machine, of the capacity of 15 tons daily.

A. S. MASON, Secretary.

**MEMPHIS, TENN.,** March 6, 1889.—We expect work on the extension of the Bolivar branch, to commence in course of 15 to 20 days. J. T. McTIGHE & Co.

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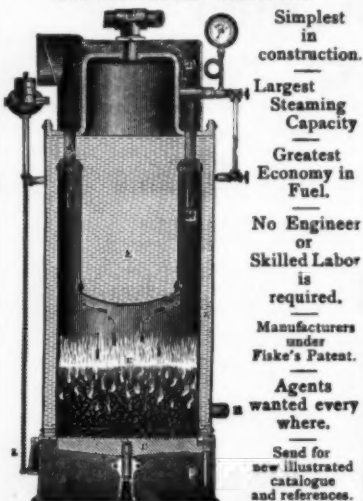
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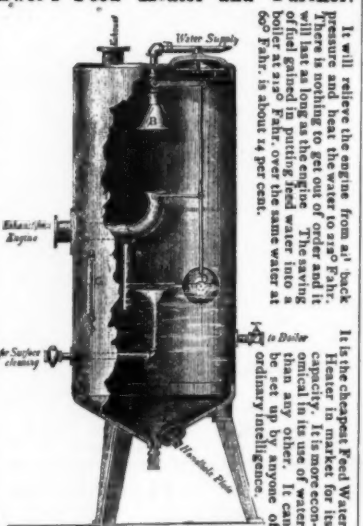


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**Kroeschells & Bourgeois' PATENT FEED WATER HEATER.**  
 For Heating Water by EXHAUST STEAM. We guarantee to heat the feed water to within a degree or two of temperature of the exhaust steam. The great trouble with other heaters, caused by the early and frequent corroding of Flues is obviated in our Heater—the material of tubes being the BEST OF BRASS. No back pressure to engine. All sizes from 20 to 1,000 h. p. and larger. Saves boiler repairs. Saves fuel.

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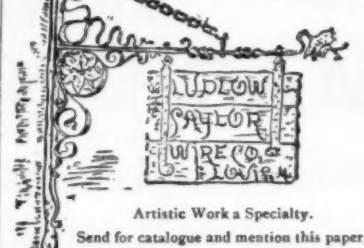
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**OUR REDUCING VALVE**  
 IS THE STANDARD  
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Artistic Work a Specialty.  
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Best Fences and Gates for all purposes. Free Catalogue giving full particulars and prices. Ask Hardware Dealers, or address, mentioning this paper, **SEDGWICK BROS., Richmond, Ind.**

**SHERWOOD'S ALL-PURPOSE HARNESS**  
 Sent on TRIAL subject to APPROVAL.

IT'S A DANDY HARNESS FOR ALL FARM WORK.

**AGENTS WANTED**

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Made of galvanized iron and copper. Strong upward draft. Exhausts foul air, odors, gases, steam, etc. from mills, stores and dwellings; cures smoky chimneys. Perfectly storm-proof. Galvanized iron and copper cornices and gutters. Sheet metal work for buildings. Send for illustrated circular.

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Detachable in every Link  
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 German and English Brands of Best Quality.

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Possesses more than Double the Capacity of other Water Wheels of same diameter, and has produced the Best Results on Record, as shown in the Following Tests at Holyoke Testing Flume:

| Size of Wheel. | Head in Ft. | Horse Power. | Per Ct. Useful Effect |
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| 16-inch.       | 18.06       | 93.17        | .9608                 |
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| 25-inch.       | 17.90       | 161.63       | .9604                 |
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WITH PROPORTIONATELY HIGH EFFICIENCY AT PART-GATE.

Such results, together with its nicely-working gate, and simple, strong and durable construction, should favorably recommend it to the attention of ALL discriminating purchasers. These wheels are of very Superior Workmanship and Finish, and of the Best Material.

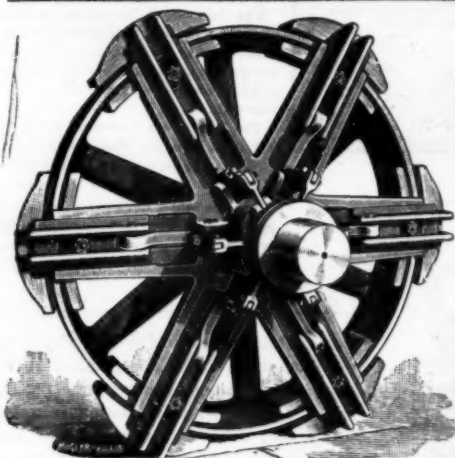
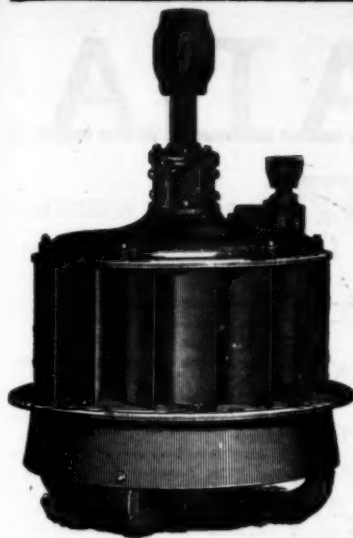
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**COUPLINGS,**  
With 2, 4, 6 or 8 Arms.  
**THE BEST IN USE.**

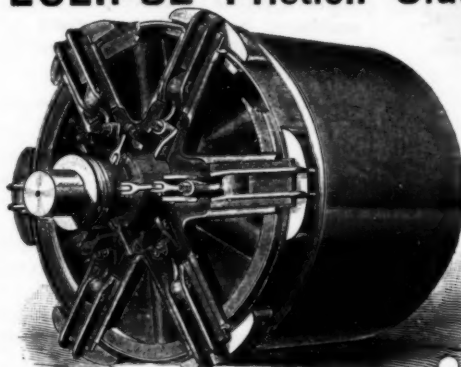
They are now doing the heaviest, most effective and most satisfactory work in the Largest Electrical Light Plants, Largest Saw Mills, Largest Flour Mills, Largest Elevators and Largest Packing Houses in the country.

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Six-Arm Clutch on Rim of Wide-Faced Double-Spoke Pulley.

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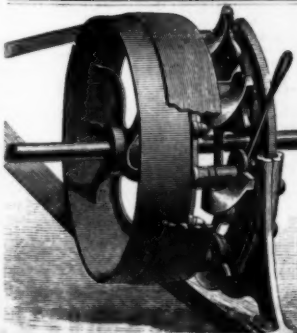
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**The Schenck Belt Holder & Shifter Co.**

GENTLEMEN:  
I have been using two of your Belt Holders for about 3 months on 42x11" pulleys, driving two 30 H. P. Edison dynamos, and they do all you claim for them, and give us no trouble whatever. I think they are far superior to friction clutches and can recommend them as saving bolting, shafting, boxes, etc.

H. D. WHEAT, Supt.  
CLIFTON (S. C.) Mfg. Co.

**The Schenck Belt-Holder & Shifter Co.**

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**TIRE UPSETTERS, BENDERS, HAND PUNCHES, ROPE HOISTS, ANVILS AND VISES, ETC.**  
SEE 1889 CATALOGUE. IT WILL PAY YOU.

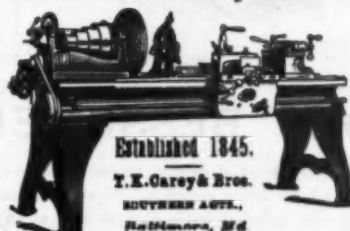
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**MACHINE TOOLS GENERALLY**  
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Drill Presses, Shapers, Band, Circular and Scroll Saws, Machines' Tools and Supplies. Lathes on trial. Catalogue mailed on application.  
182 West Second Street, CINCINNATI, O.



\$60.



**BARNES' PATENT UPRIGHT DRILLS,**

30 to 32 inch swing, with both worm and lever feed, self feed and back-gear.

**Barnes' Patent Engine Lathe,**

15 inch swing, 6 foot or 8 foot bed.

These machines are made a specialty in our factory. They have advantages not found in other machines in this line.

It will pay parties desiring to purchase or know more about these machines to send for full description and prices to

**W. F. & JOHN BARNES' CO.,** No. 121 Ruby St., Rockford, Ill.  
THOMAS K. CAREY & BROS., 22 S. Charles St., Baltimore Agents.

**Barnes' Water Emery Tool Grinder.**

Has no Pumps.

No Valves.

No piping to supply it with water.

It has nothing to get out of order; is always ready for use.

It is as easily managed as a grindstone, and will give vastly better results. It will be sold subject to approval.



## Shafting, Hangers.

Castings of every Description made.

Stationary, Distillery Mill and Sellar Work.

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**EMPLOYERS WILL PREVENT LOSS**  
BY ACCIDENTS TO  
**WORKMEN BY INSURING WITH**

**Employers' Liability Assurance Corporation.**

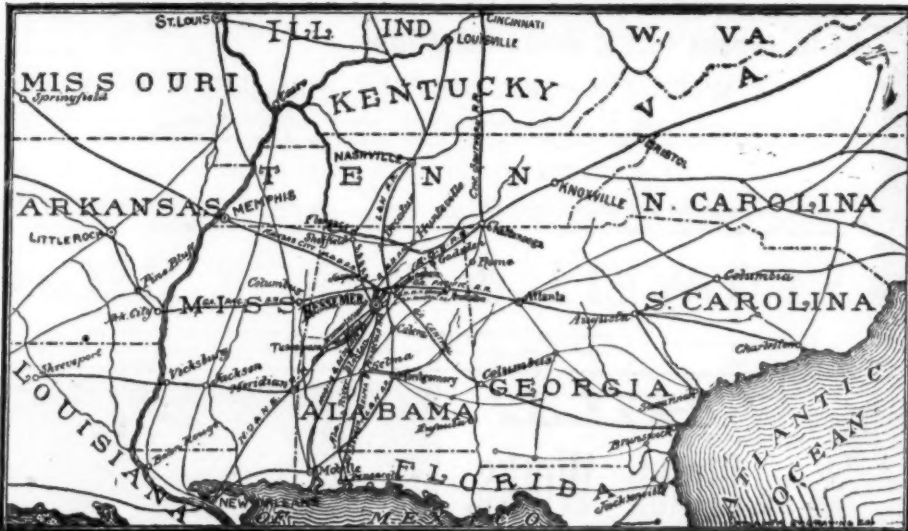
Agent, G. W. S. HALL, Baltimore  
Firms with pay rolls of over Sixty Million Dollars now protected

# BESSEMER, ALA.

## WHERE IS BESSEMER?

Located according to its latitude and longitude, Bessemer is in 33 deg. 30' North latitude and 87 deg. West longitude from Greenwich. Its position in the State of Alabama is just above its center and about midway between its eastern and western boundaries. Its position in the Southern States is a noticeably central one. It is midway between Montgomery and Decatur, between Meridian and Chattanooga, Mobile and Nashville, Savannah and Memphis, New Orleans and Louisville, all of which will readily appear from the map published herewith. So far as its geographical location is concerned it could not well be more central, more on the lines of communication and transportation between the leading and principal commercial and manufacturing centers in the South. It has lines of railway leading direct to Texas, via Vicksburg and Shreveport and via New Orleans; to Gulf ports, directly to New Orleans, to Mobile and to Pensacola; to all of the Atlantic ports and to the North, Northwest and West. No city of its age was ever so favored with so admirable, comprehensive and extensive a system of railway transportation.

On the 13th of April, 1887, the first lot was sold in Bessemer; on the 15th of the following September the place was incorporated as a city, having then a population of 1,500 people. At this time, 1st September, 1888, it has a population of 3,500. It has over 400 different structures, some of them business blocks that would highly credit a city of a hundred thousand population. Over two million dollars so far have been invested in improvements. It has completed the largest rolling mill plant in the South, and two of the largest



## THE RAILWAYS OF BESSEMER.

In an area of four blocks, nine lines of railways center:

The Alabama Great Southern R. R.  
The Louisville & Nashville Min'l Line.  
The Bessemer & Huntsville R. R.  
The Georgia Pacific R. R.  
The Kansas City, Memphis & Bessemer R. R.

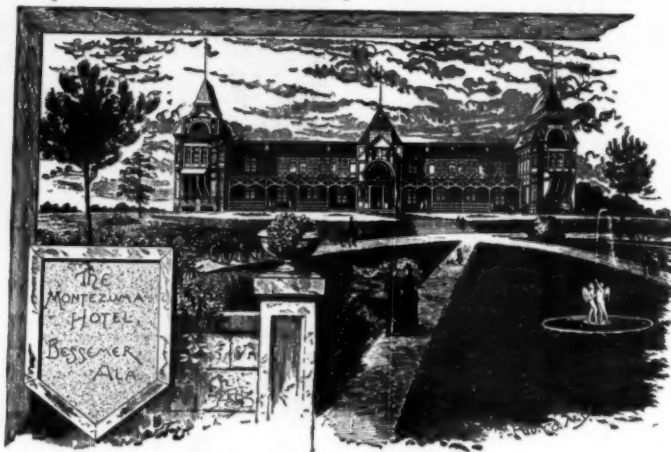
The Bessemer & Tuscaloosa R. R.  
The Bessemer Dummy Line (standard gauge).

All of these lines are running to Bessemer. The Bessemer & Huntsville is completed as far as Village Springs, forty miles on the way up Murphree's Valley, with its ultimate terminal point at Huntsville. It is being rapidly extended.

The Bessemer & Tuscaloosa is completed to Woodstock, a distance of thirty miles, lacking only eighteen miles of reaching Tuscaloosa. At Woodstock this line connects with the Elberton Coal Mines Railway.

The lines of the Bessemer, Seima & Pensacola R. R. and Mobile & Bessemer R. R., now under contract and in process of construction, both center in this area.

The Sheffield & Bessemer R. R. is projected to Bessemer. It is now built as far as Jasper, forty miles northwest of Bessemer.



MONTEZUMA HOTEL, 194x150, OPENED NOV. 1, 1887.

iron furnaces, extensive foundry and machine shops and planing mills. Five more iron furnaces are under contract, three of them with foundations already being laid. An enormous furnace factory, machine shops and boiler works are being located, and will construct the five furnaces mentioned. An enormous fire brick, tile and terra cotta plant is being established; has already commenced the manufacture of fire brick and will regularly employ 200 hands.

## WHY DOES BESSEMER GROW SO RAPIDLY?

Because it presents opportunities for the investment of capital, the establishment of manufactories and industrial institutions and for labor, common and skilled, that are unusual and unrivalled. In Bessemer, pig iron is being made cheaper than at any other point in the United States. The iron ore, the coking coal and the limestone are almost within a stone's throw of the city. The site of Bessemer is superb, unusually attractive, unimpeachably healthy, with thorough drainage and first-class water

works. It is already a leading manufacturing point, and is destined to become one of the principal manufacturing centers in the South. Schools and Churches are already established.

The illustrations are of two structures already completed, one costing \$125,000 the other \$40,000. There are a large number of similar structures in Bessemer already completed.



CHARLESTON BLOCK, 300 FEET FRONTAGE, 2D. AVE., BET. 18TH AND 19TH STREETS.


ANY INFORMATION CONCERNING BESSEMER WILL BE PROMPTLY FURNISHED BY THE


## Bessemer Land & Improvement Company.

WM. BERNEY, President. H. M. McNUTT, Secretary.




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NOT ONE CASE OF EITHER OF THESE   
DREADFUL MALADIES EXISTS OR EVER ORIGINATED AT ROME, GA.


The Annual Death-Rate is Lower at this place  than at any City of **10,000** People or more in America, being only 8.40 per thousand.

## ROME, GEORGIA,

• • Is the Coming City of the South • •

 With seven railroad outlets; two navigable rivers; with richest lands; with boundless forests of hard and soft woods; with an hundred million of tons of iron ore and manganese within a few miles of the city; with coal, slate, marble and limestone in exhaustless quantities at hand, THE VERY NATURE OF THINGS would seem to decree a future for this city more brilliant than that promised to almost any ambitious city south of the Potomac and the Ohio.

**MANUFACTURING INDUSTRIES** are rapidly locating here, and millions of northern money is investing in city property and surrounding lands. Almost every week new riches are being discovered. These mountains are yielding up their treasures, and testimonials rapidly multiply that the hoary manufacturing North must soon grapple with the beardless industrial South for championship. The rapidity of the growth of Rome is marvelous alike to citizen and stranger. One real estate holder here—the Rome Land Co.—has sold within the past ten months over one hundred thousand dollars worth of residence lots, and the demand steadily increases. Prospectors are invited to investigate the varied claims of this region.—“All roads lead to Rome.”—One of the finest hotels in the South is located here.

 There is no better newspaper than the *Tribune of Rome*. Subscribe for it—Daily, \$8.00; Weekly, \$1.00 per annum—and “Keep your eye on Rome.”

Established 1831.

**BALDWIN LOCOMOTIVE WORKS.**

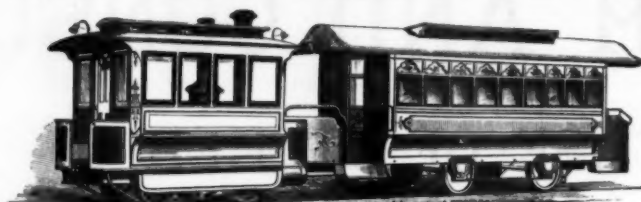
Annual Capacity 800.

**LOCOMOTIVE ENGINES,**

Adapted to every variety of service, and built accurately to standard gauges and templates.

**Steam Tramway Motors.**

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PROPRIETORS,

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**Adams & Price, Locomotive & Machine Works,**

MANUFACTURERS OF

**LOCOMOTIVES FOR POLE ROADS AND TRAMWAYS.**

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TRAMWAY CARS OF EVERY DESCRIPTION  
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(Late with Tredegar Co.)R. W. JEFFERY, Supt.  
(Late with Tredegar Co.)**The Richmond Standard Spike Co., Richmond, Va.**

Manufacturers of Dock, Ship and Railroad Spikes.

**FRANK C. B. AVERY,  
Steel Rails and Railway Equipment,  
40 Wall St., New York.**

Rails and Complete Fastenings and Fixtures, Locomotives, Dummy Engines and Motors, Passenger, Freight, Logging and Street Cars of every description. New and second-hand. On hand for immediate delivery 10 Standard and Narrow Gauge Engines, 4 Dummies for Street Railway Service, a lot of recently rebuilt 16 Street Cars, Second-hand Light Steel and Iron Rails, to relay.

**FOR SALE.**—A new 55 foot wrought iron Turntable, never has been used. The company who contracted for it do not now need it. Will be sold at reasonable figures, and I will send blue print and specifications upon application.**WANTED.**—1,000 tons old Rails for reworking, 500 tons second-hand 30, 35 and 40 pound Steel or Iron Rails for relaying. If you want to buy or sell, please write your requirements.**STEEL RAILS****PENNSYLVANIA**Standard Sections  
Light Sections  
Street RailsFish Plates,  
Frogs, SwitchesSTEPHEN W. BALDWIN  
SALES AGENT

16 lbs. Full Size.

**STEEL COMPANY**50 to 80 lbs. per yard  
16 " 45 " " "  
30 " 88 " " "  
Bolts & Nuts,  
and Crossings.NO. 2 WALL STREET  
NEW YORK N.Y.ALL GENUINE  
INGOTS & MANUFACTURES  
BEAR OUR  
REG. TRADE MARKS.

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INGOTS, CASTINGS &amp; MANUFACTURES.

THE PHOSPHOR BRONZE SMELTING CO. LIMITED

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ORIGINAL MANUFACTURERS OF PHOSPHOR-BRONZE IN THE UNITED STATES AND OWNERS OF THE U.S. PATENTS.

**Richmond Locomotive & Machine Works, Richmond, Va.**

ESTABLISHED IN 1865.

Builders of

**LOCOMOTIVES**

for every variety of service to Standard Designs or to meet views of purchasers.

**MOTORS**

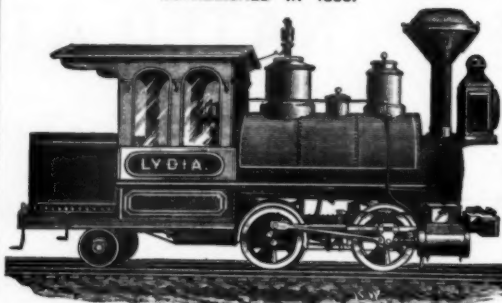
for Street Railways, Tram Roads and Minet.

Stationary Engines for heavy duty.

**BOILERS,**

Standard or Special.

Send for Catalogues, Specifications and Estimates.

**A. WHITNEY & SONS-CAR WHEEL WORKS**  
(ESTABLISHED 1947.) Philadelphia, Penn.**Chilled Car Wheels**

For all kinds of service, and made of best CHARCOAL IRONS and in CONTRACTING CHILLS.

**Steel Tired Wheels,**

WITH STRONG CAST IRON CENTRES.

Castings, CHILLED AND UNCHILLED.

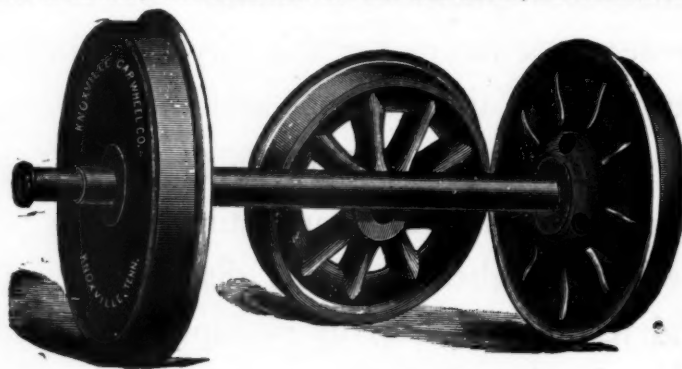
**Knoxville Car Wheel Co.**

—KNOXVILLE, TENN.—

Manufacturers of All Kinds of

**CHILLED WHEELS**

For Railroads, Street Railroad, Ore and Coal Mines, and Lumbermen.

Steam Hammers,  
Steam Hoists,  
Foundry Cupolas,  
Derricks, Crabs,  
Horse Powers,  
Shieves, Drill Heads,  
Gearing, Pulleys,  
Bolts of all sizes,  
Locomotives and Engines  
Repaired and Indicated.

CORRESPONDENCE SOLICITED.

Steel and Iron Boilers,  
Guild's Automatic  
Boiler Cleaner,  
Car and Locomotive Castings,  
Soft Iron Castings of all kinds.  
Heavy Castings a specialty.  
Wheels mounted on Axles if  
desired, with Oil Boxes  
and Bolts.

MENTION THIS PAPER.

**EMPLOYERS WILL PREVENT LOSS**  
BY ACCIDENTS TO  
WORKMEN BY INSURING WITH**Employers' Liability Assurance Corporation.**Agent, G. W. S. HALL, Baltimore  
Firms with pay rolls of  
over Sixty Million Dollars now protected



## TRADE NOTES.

RYAN & McDONALD, manufacturers of contractors' supplies, Waterloo, N. Y., are making large shipments of dump cars for railroad construction into Virginia, North Carolina and South Carolina. They also report good sales of hoisting engines and machinery.

THE Sullivan diamond prospecting core drill and other rock drilling tools and supplies furnished by the Diamond Prospecting Co., 74-76 West Lake street, Chicago, Ill., are described and illustrated in the company's catalogue just issued. The company contract for prospecting mineral lands with the Sullivan drill, and carry an extensive stock of machinery for use in surface or underground prospecting, submarine work, mine ventilation, drainage holes, engineers' tests, etc., as also quarrying machinery, hoisting and hauling engines, etc., and hand and power drills.

THE Ivens & Son Machine Co., manufacturers of hoisting engines, &c., New Decatur, Ala., report great success with a new style of grate that is especially adapted to burning Southern coal, which they manufacture, and claim that it effects a saving of 20 per cent. in fall. They are also introducing Ivens' patent hoisting machinery for collieries. This invention preserves the wire rope, as the drum travels across the rope, instead of the rope across the drum. The Donaldson colliery, of Tamaqua, Pa., is fitted with this machinery, and raises a car of coal 360 feet in less than thirty seconds, including stopping and starting.

MESSRS. TALBOTT & SONS, Macon, Ga., write us: "We have lately sold, for use in South Georgia, two 40 horse-power saw mill outfits, complete, and two 50 horse-power outfits, which we suppose are what you refer to. We are putting into the 'Georgia mill,' which has been bought by Messrs. Plant & Troy, of this city, and capacity largely increased, a 100 horse-power engine and two 50 horse power boilers. We have contracted with Forsyth Manufacturing Co., Forsyth, Ga., for steam generating plant for their new cotton factory now being built. Have just completed a 50 horse-power engine and boiler, now running, for Stevens' Bros. & Co., Stevens' Pottery, Ga., who have largely increased their already large plant for the manufacture of clay-pipe, fire-brick, etc. We have also just contracted for an outfit of 25 horse-power for grinding corn for distillery at Griffin, Ga., and a spoke and handle outfit, with power for same, at Montezuma, Ga."

MR. WM. SIMPKIN, M. E., who has been superintendent of the Richmond Locomotive and Machine Works, of Richmond, Va., for two years, and who prior to that had been constructing engineer for four years of the Tanner & Delaney Engine Co. (which was succeeded by the Locomotive and Machine Works), has formed a partnership with Mr. Hillyer, owner of the Warwick Iron Works, at Newport News, Va. The firm will be Simpkin & Hillyer, and their office will be at Richmond, though they will enlarge and operate the Warwick Iron Works. Their principal business will be that of constructing engineers, but they will also furnish plans, specifications and estimates for any class of engineering work; will make valuations of machinery, attend arbitrations; will make a specialty of economical steam power plants, rope and belt driving for cotton and other mills; will also prepare working drawings, tracings and blue prints for shop or other use, and will contract for the erection of engines, boilers, gas and creosote plants; they will furnish locomotives for all purposes, motors for street railways, &c., &c.

THERE is a growing conviction that the manufacturers of wood-working machinery should convene in convention to regulate

affairs and matters of interest to their trade. The buyers and users of this class of machinery will be benefited without a doubt, as the aim of the projectors of this interchange of ideas is to bring about a proper adjustment of conflicting opinions as to the best methods to serve their customers. Lumbermen and wood-workers are to be consulted to ascertain their desires, so as to reach a better understanding of their wants—that improvements may be made and a uniform standard be adopted in quality, sizes and systems. The Egan Co., of Cincinnati, Ohio, have taken the initiative in this direction, and are bringing about the necessary steps to have the builders of wood-working machinery come together at an early day. There is now no organized effort which has a tendency to give the wood-worker better and standard machinery for his purposes, and it is to his advantage that recognition be given to the promoters of this proposed betterment of the tools which are so essential in his business. At no time in the rise of this great industry have the manufacturers ever convened to become better acquainted with each other, and it is to be hoped that the outcome will bring around the best results to all concerned.

THE Taylor Manufacturing Co., of Chambersburg, Pa., builders of the Beck automatic engines, horizontal and vertical styles, report trade as fairly active, and the following among recent installations and sales: One 13x15-inch automatic engine to the Thomson-Houston Electric Light Co., of Natchez, Miss.; one 12x15-inch engine and two 60 and 70 horse-power boilers, all complete, to the Danville Street Car Co., of Danville, Va., for operating their Thomson-Houston electrical railroad; the second engine, 7x8 inches, to the Grace Hospital, of Detroit, Mich.; one 15x18-inch engine to the Georgia Electric Light Co., of Atlanta, Ga., for operating their Thomson-Houston electrical railroad; one 13x15-inch engine to the Fort Wayne (Ind.) Jeane Electric Light Co.; one 10x12-inch engine and 56-inch by 16-foot boiler, complete, to the Lewistown (Pa.) Electric Light, Heating & Power Co.; one 9x12-inch engine to United States Trust Co., New York City; one 7x8-inch engine for the Acyman Brewing Co., Wheeling, W. Va.; one 10x12-inch engine and 60-inch by 14-foot boiler, complete, to the Winchester Gas Co., Winchester, Va.; one 9x9 vertical automatic engine and boiler, arranged on same base, to the Cumberland Valley Railroad Co., for operating the dynamos in their electric light car; one 13x15-inch engine and 66 inch by 16-foot boiler, complete, to the Baton Rouge (La.) Electric Light & Power Co.; one 11x15-inch engine to the Shreveport Gas Co., Shreveport, La.; all of the foregoing engines and boilers are for electrical service. Have also sold through their Chicago (Ill.) office one 12x15-inch and 20x26-inch engines to operate trains of rolls. This company also report an increasing demand for the plain slide valve vertical engine illustrated in the MANUFACTURERS' RECORD of some weeks since, as well as for their stationary and portable engines of the "Tiger" line for general power service.

THE American House, Boston, has always been noted for the invariable excellence of its table, and never more than at present. Mr. Rice well knows that it is quality rather than quantity that pleases the experienced guest.

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## THE MARKETS.

OFFICE MANUFACTURERS' RECORD,  
BALTIMORE, March 13, 1889.

Last week's meeting of the Bessemer Steel Co. at Philadelphia was interesting, as it allowed the representatives of the various companies to compare notes. Reports received show that the industry is in a more depressed condition than since rails were first made in this country. No plans for the future were agreed upon, but the general situation only was discussed. The facts leaked out that there is a confidence among rail makers in a reviving demand for steel rails before the close of the year. The reason for this confidence is that there is much more railroad building projected than twelve months ago. In fact there is sufficient projected work now to keep all mills busy if material for the projected work was in demand. New roads are projected by strong companies along the Pacific coast, in Arkansas, Texas, and in the section of country between the lakes and the Rocky mountains, notwithstanding all that is said to the contrary. The Pacific roads also intend to do a good deal of railroad building by way of constructing lateral lines. In addition to this we are to do a good deal of bridge work and repairing work. A large amount of work is also projected in the larger cities into which iron and steel will very largely enter. The locomotive works are also likely to receive a great deal of business during the coming three months, and several are now making inquiries for supplies. Architectural iron workers are also in receipt of numerous inquiries for material, and the building interests generally are anticipating a greater activity than last year. Many of these anticipations will not be realized, but there is enough in them to say in a general way that the prospects for the ensuing season are better than they were last March. Notwithstanding this, some journals throughout the North are disposed to make gloomy predictions for the iron trade this year. The Philadelphia Press on Monday published three columns or more of interviews with iron makers throughout Pennsylvania and New Jersey, showing in a general way a rather depressed condition of the industry.

The general tone of opinion is that the iron trade is at its worst, and that a gradual improvement is likely to take place East, West and South. There are many reasons for believing that this is the correct view of the case. One is that the stocks of crude and finished iron are very light. It is thought that there is about a month's supply of crude iron in the country; as for the other, the supply is not so great. Some have only a month's business, and others only a week's. Spring and summer requirements have been held back, and even now are withheld in the view of lower prices being established. Iron and steel makers complain that there is scarcely any margin, and in most cases they do so justly. Rails have been selling at cost, and several makers refuse to book new orders, excepting at a margin of fifty cents per ton. No large orders were placed last week, but there are inquiries for large lots, estimated by some authorities at something over 100,000 tons. Jay Gould has gone into the Southwest, reaching there Sunday night, with a view of not merely seeing how his properties are doing, but to order the construction of considerable new mileage there should he feel it safe to do so. Mr. Gould proposes to improve his system and build as much mileage as promises of better traffic justifies. He will also order considerable work to complete his new connections with the Richmond Terminal Co., and in general proposes to put his properties into the best possible condition, for he, like many other railway managers, believes that the future is full of promise for the railways. There is really but little of interest in finished iron.

Mills are barely able to run on new business. The nail makers are hanging between two opinions. Building prospects are favorable, but builders are very cautious about buying nails. The feature of the week was the consolidation of the North Chicago Rolling Mill, the Joliet, the Union Steel Co. and iron mills all into one company with a capital of \$25,000,000. No serious harm has followed the failure of the Reading Iron Co. A large meeting of creditors was held last week and steps were taken to enable them to suffer as little as possible by the failure. An official of the Cambria Iron Co. stated yesterday that some evidences are coming up which show a slight improvement in the trade, among them the fact that Connellsville coke has advanced from \$1.10 to \$1.15 at the ovens. At Columbia all excepting the Chestnut Hill and the Cordelia furnaces are in blast. Another leading maker thinks that the present depression is only temporary and will soon disappear. The manager of the Chickies furnace thinks that bed rock has been reached and that a general improvement is at hand. Wm. Patton, of the Susquehanna Iron Co., thinks that the depression is due to the over-production in the South. McHose & Sons, of Norristown, attribute much of the dullness and low prices to the cheap labor, low cost of supplies of coal and ore, and low freight rates in the South as compared to Pennsylvania freights. The Trenton and New Jersey iron and steel makers believe that when the railroad wars are over, and prospective railroad builders see their way clear to develop new sections, that demand will increase.

The trade and daily newspapers are full of talk concerning the impending collapse of the copper syndicate. The French Government and the Rothschilds had to come to the rescue of the syndicate or it would have gone down with a crash. Sufficient money has been advanced to tide it over temporarily, but with a yearly production of 250,000 tons of copper and a consumption of less than 200,000 tons, there is no likelihood of the ultimate success of that combination. It must go down at last, and go it will. The Rothschilds have loaned money to protect their own interests in it, but they will not throw many good dollars after bad ones.

## HARDWARE.

The volume of trade continues satisfactory, and there have been no changes of moment since last report. Southern jobbers have generally had as good trade as for years, and a large business is confidently expected for the fall. An advance in copper rivets and bars was promised for the near future, but the possible collapse of the French syndicate will not tend to advances in that line.

## IRON.

CINCINNATI.—Messrs. Rogers, Brown & Co. write: The market for Southern coke iron at this point is firm at an advance of 25 cents above the lowest ebb of the past few months. Some qualities and grades show 50 cents raise, due to a greater relative change in the supply and demand in their particular class. Northern brands tributary to this field have recently been held somewhat firmer than Southern, and do not yet show any change, the Southern stiffening being no more than to bring the two into line. The enquiry and buying is chiefly from the heaviest customers, who consider it a favorable time to stock up against future needs. This has the effect of making the market appear quiet, while a good volume of business is really in progress. Very little iron is passing on the market. Such lots as are pressed at concessions find ready sale at their prices. Charcoal irons of all kinds, except the high chilling grades of standard wheel brands, are in rather more abundant supply than the demand absorbs, and the same is true of Ohio softeners and silveries.

LOUISVILLE.—Messrs. Geo. H. Hull & Co. write: "The market has been quiet during the past week, with few sales. Parties are in the market for iron for long delivery, but their views are so low that furnaces are not disposed to sell. There is a good demand for car-wheel irons, especially for deliveries running throughout the year. Old wheels are freely offered, and some have been sold as low as \$17."

LOUISVILLE.—Messrs. Hall Bros. & Co. write: "The market has been rather quiet during the past week, although some good-sized orders have been placed. Some furnaces are disposed to hold for improved figures, while others are selling at figures that have been ruling for some time past. Shipments on orders are very heavy, and would be larger if the railroads could furnish a sufficient supply of cars for transportation. There has been no material change in the situation during the week under review."

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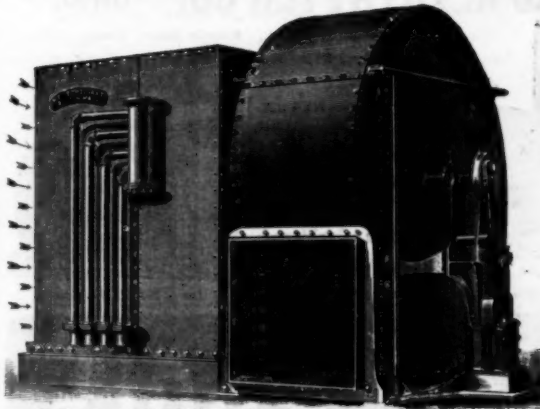
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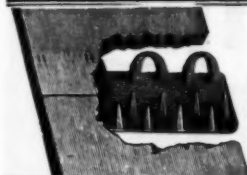
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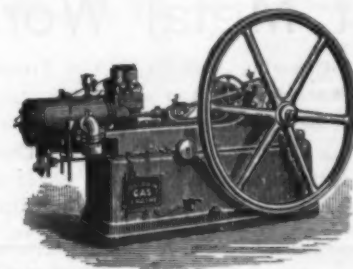
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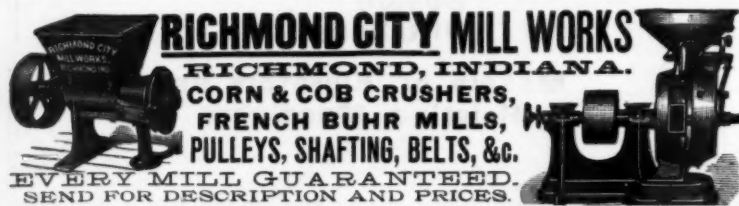
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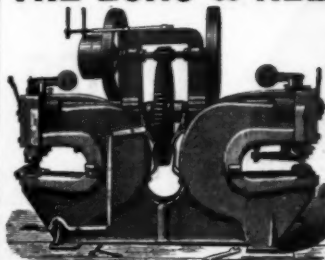
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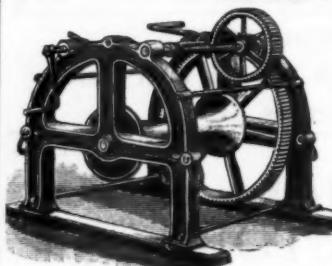
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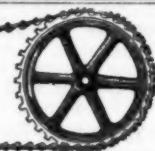
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| Japanese Flat Head                          | 40 |
| Coch, Patent Gimlet Point                   | 40 |
| Coch, Common or Lag                         | 40 |
| Bed   | 40 |
| Machine, Flat Head, Iron                    | 40 |
| Machine, Round Head, Iron                   | 40 |
| Beach, Iron                                 | 40 |
| Beach, Wood, Beach                          | 40 |
| Beach, Wood, Hickory                        | 40 |
| Hand, Wood                                  | 40 |
| Hand Rail, Sargent's                        | 40 |
| Hand Rail, Humason, Beckley & Co.'s         | 40 |
| Hand Rail, Am. Screw Co., list Jan. 1, 1884 | 40 |
| Jack (Wilson's)                             | 40 |

## SCREEN FRAMES AND VICTORIES.

|   |           |
|---|-----------|
| Standard Window Screens No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100  | dis 50kx5 |
| Door  | dis 50kx5 |
| Window Corner Irons, No. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100   | dis 50kx5 |
| Door  | dis 50kx5 |
| Door Latches, 1/2 dozen, 3/4 dozen, 1 dozen, 1 1/2 dozen, 2 dozen, 3 dozen, 4 dozen, 5 dozen, 6 dozen, 7 dozen, 8 dozen, 9 dozen, 10 dozen, 11 dozen, 12 dozen, 13 dozen, 14 dozen, 15 dozen, 16 dozen, 17 dozen, 18 dozen, 19 dozen, 20 dozen, 21 dozen, 22 dozen, 23 dozen, 24 dozen, 25 dozen, 26 dozen, 27 dozen, 28 dozen, 29 dozen, 30 dozen, 31 dozen, 32 dozen, 33 dozen, 34 dozen, 35 dozen, 36 dozen, 37 dozen, 38 dozen, 39 dozen, 40 dozen, 41 dozen, 42 dozen, 43 dozen, 44 dozen, 45 dozen, 46 dozen, 47 dozen, 48 dozen, 49 dozen, 50 dozen, 51 dozen, 52 dozen, 53 dozen, 54 dozen, 55 dozen, 56 dozen, 57 dozen, 58 dozen, 59 dozen, 60 dozen, 61 dozen, 62 dozen, 63 dozen, 64 dozen, 65 dozen, 66 dozen, 67 dozen, 68 dozen, 69 dozen, 70 dozen, 71 dozen, 72 dozen, 73 dozen, 74 dozen, 75 dozen, 76 dozen, 77 dozen, 78 dozen, 79 dozen, 80 dozen, 81 dozen, 82 dozen, 83 dozen, 84 dozen, 85 dozen, 86 dozen, 87 dozen, 88 dozen, 89 dozen, 90 dozen, 91 dozen, 92 dozen, 93 dozen, 94 dozen, 95 dozen, 96 dozen, 97 dozen, 98 dozen, 99 dozen, 100 dozen | dis 50kx5 |
| Porter's Patent Window and Door Screen Frames   | dis 50kx5 |

## PER BOX SETS.

|         |           |
|---------|-----------|
| No. 20  | dis 50kx5 |
| No. 21  | dis 50kx5 |
| No. 22  | dis 50kx5 |
| No. 23  | dis 50kx5 |
| No. 24  | dis 50kx5 |
| No. 25  | dis 50kx5 |
| No. 26  | dis 50kx5 |
| No. 27  | dis 50kx5 |
| No. 28  | dis 50kx5 |
| No. 29  | dis 50kx5 |
| No. 30  | dis 50kx5 |
| No. 31  | dis 50kx5 |
| No. 32  | dis 50kx5 |
| No. 33  | dis 50kx5 |
| No. 34  | dis 50kx5 |
| No. 35  | dis 50kx5 |
| No. 36  | dis 50kx5 |
| No. 37  | dis 50kx5 |
| No. 38  | dis 50kx5 |
| No. 39  | dis 50kx5 |
| No. 40  | dis 50kx5 |
| No. 41  | dis 50kx5 |
| No. 42  | dis 50kx5 |
| No. 43  | dis 50kx5 |
| No. 44  | dis 50kx5 |
| No. 45  | dis 50kx5 |
| No. 46  | dis 50kx5 |
| No. 47  | dis 50kx5 |
| No. 48  | dis 50kx5 |
| No. 49  | dis 50kx5 |
| No. 50  | dis 50kx5 |
| No. 51  | dis 50kx5 |
| No. 52  | dis 50kx5 |
| No. 53  | dis 50kx5 |
| No. 54  | dis 50kx5 |
| No. 55  | dis 50kx5 |
| No. 56  | dis 50kx5 |
| No. 57  | dis 50kx5 |
| No. 58  | dis 50kx5 |
| No. 59  | dis 50kx5 |
| No. 60  | dis 50kx5 |
| No. 61  | dis 50kx5 |
| No. 62  | dis 50kx5 |
| No. 63  | dis 50kx5 |
| No. 64  | dis 50kx5 |
| No. 65  | dis 50kx5 |
| No. 66  | dis 50kx5 |
| No. 67  | dis 50kx5 |
| No. 68  | dis 50kx5 |
| No. 69  | dis 50kx5 |
| No. 70  | dis 50kx5 |
| No. 71  | dis 50kx5 |
| No. 72  | dis 50kx5 |
| No. 73  | dis 50kx5 |
| No. 74  | dis 50kx5 |
| No. 75  | dis 50kx5 |
| No. 76  | dis 50kx5 |
| No. 77  | dis 50kx5 |
| No. 78  | dis 50kx5 |
| No. 79  | dis 50kx5 |
| No. 80  | dis 50kx5 |
| No. 81  | dis 50kx5 |
| No. 82  | dis 50kx5 |
| No. 83  | dis 50kx5 |
| No. 84  | dis 50kx5 |
| No. 85  | dis 50kx5 |
| No. 86  | dis 50kx5 |
| No. 87  | dis 50kx5 |
| No. 88  | dis 50kx5 |
| No. 89  | dis 50kx5 |
| No. 90  | dis 50kx5 |
| No. 91  | dis 50kx5 |
| No. 92  | dis 50kx5 |
| No. 93  | dis 50kx5 |
| No. 94  | dis 50kx5 |
| No. 95  | dis 50kx5 |
| No. 96  | dis 50kx5 |
| No. 97  | dis 50kx5 |
| No. 98  | dis 50kx5 |
| No. 99  | dis 50kx5 |
| No. 100 | dis 50kx5 |

## SHRINE AND SCISSORS.

|   |           |
|---|-----------|
| American (Cast) Iron                      | dis 50kx5 |
| Pruning                                   | dis 50kx5 |
| Barnard's Lamp Trimmers                   | dis 50kx5 |
| Timmer                                    | dis 50kx5 |
| Massachusetts                             | dis 50kx5 |
| Seymour's                                 | dis 50kx5 |
| Jersey Shears                             | dis 50kx5 |
| Wiss & Son, Nickle, 50kx5; Japaned, 60kx5 | dis 50kx5 |
| O. S. Co. Brand                           | dis 50kx5 |
| Full Nickel                               | dis 50kx5 |
| Jap. Handles, Nickel Blade                | dis 50kx5 |

## SHRIVERS.

|                                       |           |
|---------------------------------------|-----------|
| Sliding Door, M. W. & Co., List       | dis 50kx5 |
| Sliding Door, R. & E. List            | dis 50kx5 |
| Sliding Door, Patent Roller           | dis 50kx5 |
| Sliding Door, Ft. Roller, Hatfield's  | dis 50kx5 |
| Sliding Door, Russell's Anti-Friction | dis 50kx5 |
| Also see Hangers                      |           |

## SHOVELS AND SPADES.

|                                 |           |
|---------------------------------|-----------|
| Ames, New List, November 1 1885 | dis 50kx5 |
| Griffiths                       | dis 50kx5 |
| Remington's (Lowman's Patent)   | dis 50kx5 |
| Rowland's                       | dis 50kx5 |
| Lippincott, new list            | dis 50kx5 |
| Hewy, Sine & Co.                | dis 50kx5 |

## SILVER PLATED HOLLOW WARE.

|                       |           |
|-----------------------|-----------|
| Wm. Rogers Manf. Co.  | dis 50kx5 |
| Meriden Britannia Co. | dis 50kx5 |

## SOLDERING IRONS AND COPPERS.

|                             |           |
|-----------------------------|-----------|
| Covett's Soldering Irons    | dis 50kx5 |
| Covett's Adjustable Coppers | dis 50kx5 |

## SPOONS.

|                             |           |
|-----------------------------|-----------|
| Britannia                   | dis 50kx5 |
| Tinned, Iron, Table and Tea | dis 50kx5 |
| Tinned Iron Basting         | dis 50kx5 |
| German Silver               | dis 50kx5 |

## STONES.

|                              |           |
|------------------------------|-----------|
| Hindstons No. 1, 4c; Axx, 5c | dis 50kx5 |
| Sand Stone                   | dis 50kx5 |
| Washita Stone                | dis 50kx5 |
| Washita Stone, Silps         | dis 50kx5 |
| Arkansas                     | dis 50kx5 |

## SQUARES.

|                                  |           |
|----------------------------------|-----------|
| Steel                            | dis 50kx5 |
| Iron                             | dis 50kx5 |
| Nickel Plated                    | dis 50kx5 |
| Try Square and T Bevel           | dis 50kx5 |
| "Notched" Try Square and T Bevel | dis 50kx5 |

## AVERY FLUSH BEVEL SQUARES.

|                               |           |
|-------------------------------|-----------|
| Avery Flush Bevel Squares     | dis 50kx5 |
| Avery Flush Bevel Protractors | dis 50kx5 |

## TACKS, BRADS, &amp;c.

|  |           |
|--|-----------|
| American Iron Carpet Tacks, all kinds  | dis 50kx5 |
| Steel Carpet Tacks, all kinds          | dis 50kx5 |
| Swedes Iron Carpet Tacks, all kinds    | dis 50kx5 |
| Swedes Iron Tacks                      | dis 50kx5 |
| Tinned Swedes Iron Tacks               | dis 50kx5 |
| Tinned Swedes Iron Upholsterers' Tacks | dis 50kx5 |
| American Iron Cut Tacks                | dis 50kx5 |
| Gimp and Lace Tacks                    | dis 50kx5 |

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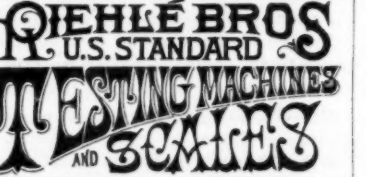
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Buck Thorn Galvanized

Picture Wire

Clothes Line Wire, Galvanized

Wire Cloth, green, drab and black

WIRE NAILS.

Standard Penny Nails

Wire Nails List, November 16, 1885

WRENCHES.

American Adjustable

Baxter's Adjustable "S" list Jan. 1, 1885

Baxter's Diagonal

Cox's Genuine

Cox's "Mechanics"

Cox's Pattern, Malleable

Cox's Pattern, Wrought

Girard Standard

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Universal, XX, No. 1 1/2

Universal, XX, No. 2

Universal, XX, No. 3

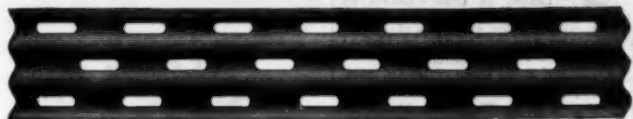
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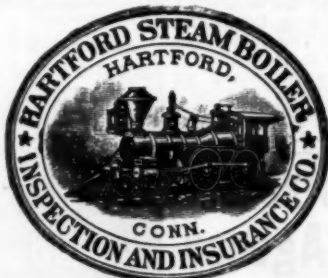
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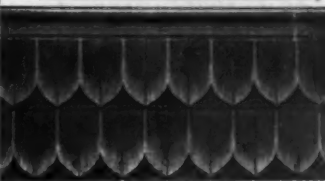
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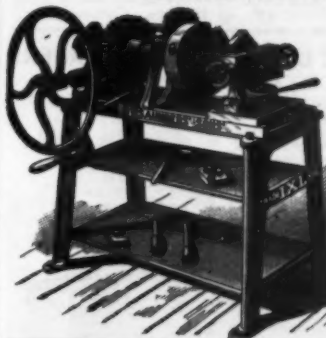
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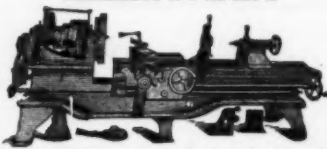
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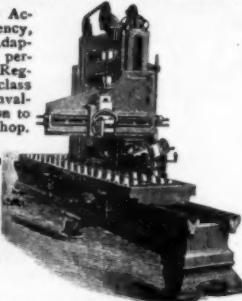
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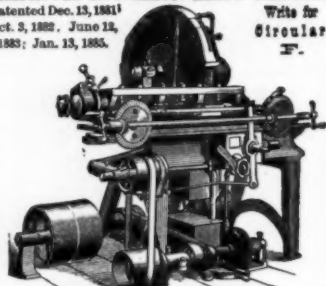
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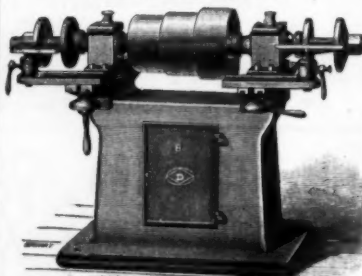
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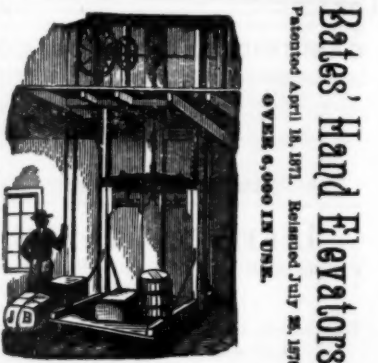
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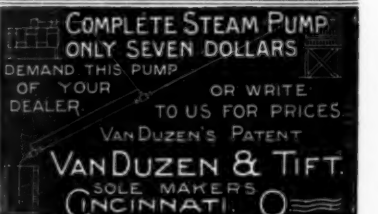
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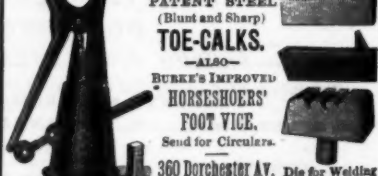
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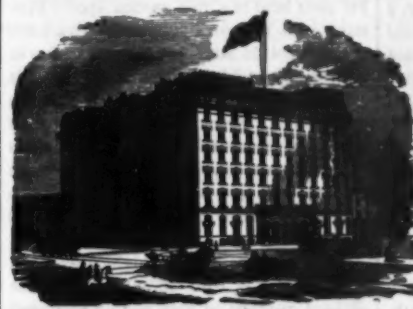
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## The Natural Resources of North Alabama.

### What Sheffield Has Done.

SHEFFIELD, ALA., March 1, 1889.

Editor Manufacturers' Record:

The impression seems to be general that this section depends on iron and iron alone for future progress and present prosperity, and that, outside of iron making, North Alabama is a barren waste, a desolate desert. While it is true beyond doubt, proved by test and experience, that iron can be made at Sheffield and shipped to Pittsburgh cheaper than the same grade of iron can be made there, yet Sheffield does not rely alone on iron. But, you ask, can iron be made cheaper in Sheffield than in Pittsburgh? That question is answered by the fact that Pittsburgh is to-day the best customer in the market for Sheffield iron. No one doubts the fact that the great revolution now turning the tide of trade and immigration to the South, the millions being invested, the colossal fortunes made in this section, is due to iron developments; still Sheffield has more than iron. Cotton is here, though the royal old monarch has abdicated in favor of iron. The same causes that lead to the rapid building of furnaces will lead to the building of cotton mills. Even now the cotton manufacturer of the East is growing equally as anxious as the iron manufacturer of the North, and their eyes are turning longingly to the sun-kissed South, where nature has done so much and people so little; where climate is grand, where minerals form mountains and nature produces the cereals essential to man; where the nuggets of iron are more bountiful than pine nutmegs and boxwood hams in New England.

Corn is not grown to any extent in this great Tennessee valley, yet it is as productive as either the Wabash or the Ohio valleys. Wheat-growing has attracted little attention, yet the location of one big mill in Sheffield has caused already the planting of 1,500 acres of wheat and more corn. Thus the law of supply and demand for home products is being inaugurated. It has been the custom to import all that supplied the wardrobe and the larder and grow cotton only, thus shipping each year the cream from the land and using skimmed milk at home. Clover that is indigenous to the soil is not grown, and range rather than pasturage supplies the nutrition furnished the miserable apology for live stock. The grazing fields for Will Hamilton's short-horns or the breeding pastures of Milt. Young's racers are not more adapted to stock raising than is this fertile section. Fayette county, Ky., is not more suitable for fine stock raising and fancy farming than is Colbert county, Ala., yet the land in the former sells for from \$200 to \$1,000 per acre, while the land in the latter sells for from \$3 to \$15, all due to attention. The well-bred stock of the Fayette county farm will sell for more here than there. The epicure here rolls the tender morsels of a blue-grass beef under his tongue at 20 to 25 cents per pound, and takes stock in a company to make door hinges of his native steak, ignoring the fact that if the native farmer here had kept pace with the era and abreast the times he could to-day be supplying the best tables with the best necessities and commanding the best prices.

The much-maligned broncho stands the unchallenged peer of the native Rosinante, and yet McGrathiana never grew a more nutritious stalk of blue-grass than these that cover our protected spots. As early as 1820 the Jacksons bred on their farm, nine miles from here such horses as Glen-coe, Leviathan, and the mother of winners, Peytona. To this beginning the kings and queens of the turf to-day trace their

lineage. In two, if not one decade, this section would rival if not excel the world-renowned blue-grass region of Kentucky.

Eight miles from here some ten years ago a colony of some 300 Germans bought 2,000 acres of alleged waste land in the "the barrens," paying for it \$5 per acre. They indulged in horticulture and fancy farming. That is now the most thrifty and prosperous settlement in the county. The land around them seems of no value, yet their land is a rich garden spot. Five miles west of here a gentleman owns 1,800 acres of cotton land and has three acres in grapes. He told me Saturday that his grape land paid more net revenue than his cotton land. From 30 to 40 miles south of here is a colony of German wine-makers and small farmers. The land they own is held at from \$50 to \$500 per acre. The land around them can be bought at \$2.50 to \$6 per acre.

Canned fruits sell at high prices and ready sale, yet fruit enough rots on the orchard grounds of this section each year to supply several canneries. The old regime of cotton, mule, negro, must give away, and the farmer must succeed the planter. This is assured in the natural order of things and the imperative demands of the day. Four years ago a negro talked to the business end of a mule as he plowed the cotton on the present site of Sheffield. To-day blocks of brick houses stand on well-paved streets, and men who represent their millions speak with their names at the business end of a check. No spot on earth offers superior inducements to the farmer than does Colbert county. But what is to sustain the farmer in supplying a market for his products? To show you the demand I will give you a list of the industries that are in this four-year-old town that really begun to build in April, 1887:

Sheffield Land, Iron & Coal Co., capital stock \$1,000,000, assets \$4,500,000.  
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Mobile Real Estate Co., \$50,000. Sheffield Real Estate Co., \$150,000; Sheffield & Mobile Improvement Co., \$100,000; Sheffield Store Works, \$50,000.

The following industries have been organized since November 1st, 1888:

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chine shops Sheffield & Birmingham Railroad.  
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In addition to the above there are negotiations pending for the building of four large industries and a number of small ones. On this basis we can assert that Sheffield will be second to no town in the South in progress. This is no advertising dodge of bogus industries on paper. The hands employed in the above list, when all are in operation, will exceed 2,500. This will insure a population of 6,000 additional to our present 4,000. Thus, you see, that as the manufacturing industries

grow, so will a demand for the products of the soil grow. The one must keep pace with the other. No spot elsewhere can offer more reason for a city than this. You can build a wall all around the city covering a radius of fifty miles, and within that wall can be grown all that man needs, and also iron and coal enough can be found to run many furnaces for many years. These are the reasons why the site of Sheffield was selected. It is at the actual head of deep navigation on the Tennessee river, and while an old cotton field four years ago, it will to-day give more tonnage to its three railroads than the entire cotton crop of the United States amounts to  
TOM L. CANNON.

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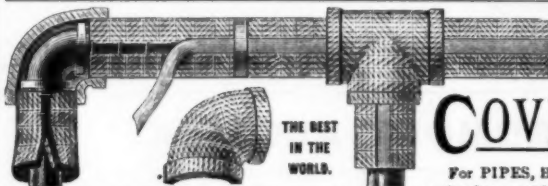


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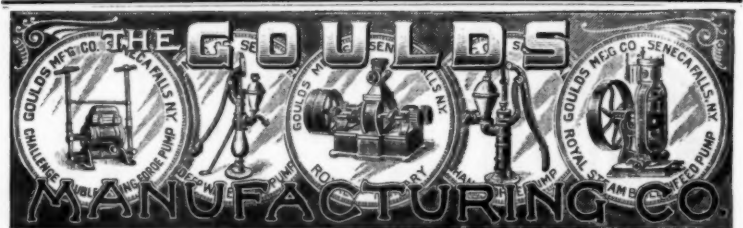
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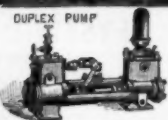
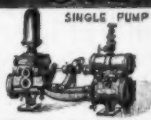
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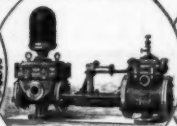
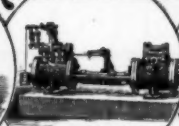
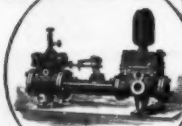


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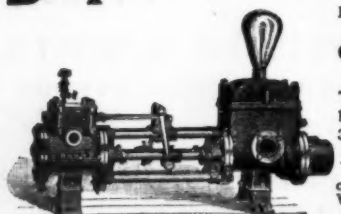
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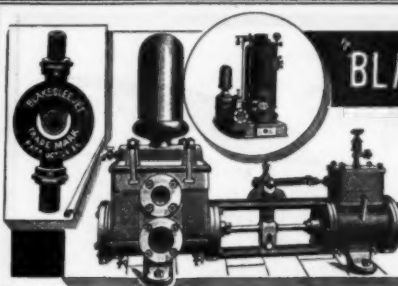
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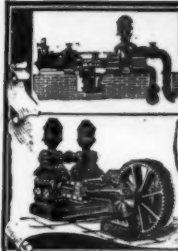


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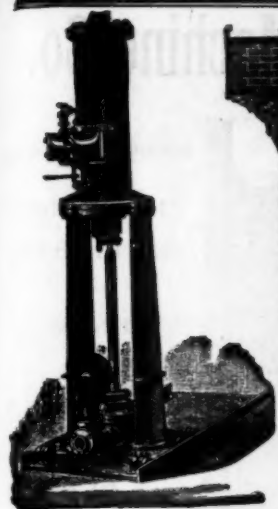
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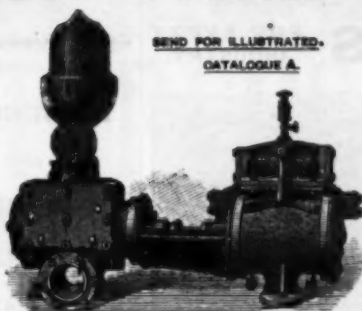




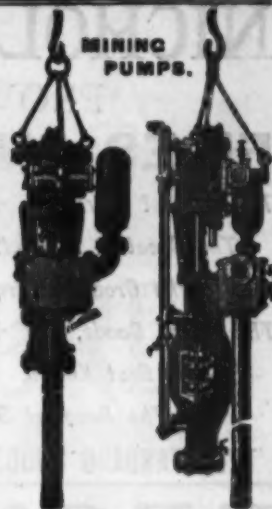
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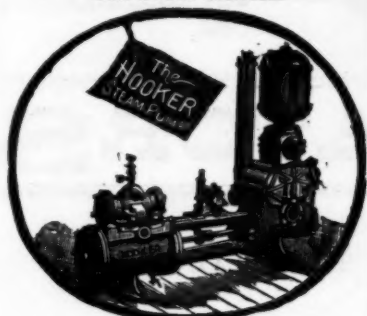
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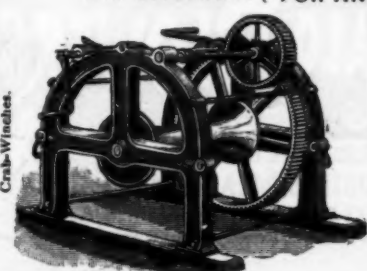
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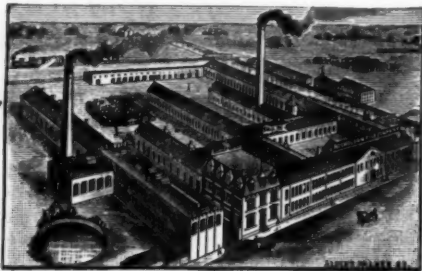
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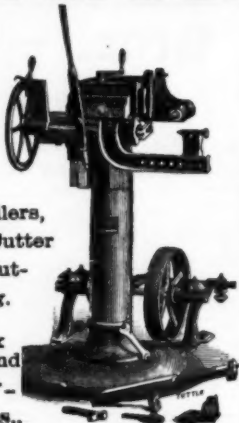
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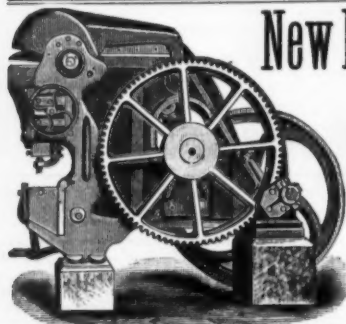
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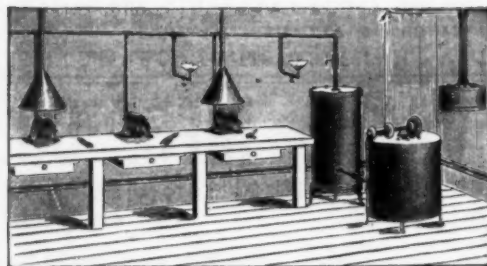
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